# PeriView Reference Manual

**(Software Release 2.1)**

**Avaya Business Communications Manager**
Release 6.0

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## Table of Contents

# Preface

## Scope

PeriView is a Graphical User Interface (GUI) tool that is used with the Avaya Media Processing Server Series (hereafter, known as Processing Server).

The PeriView Reference Manual provides information on how to use PeriView and its subset of tools. A companion document, PeriView Quick Start Guide offers a concentrated version of this material.

In addition to these documents, refer to the Processing Server reference material, available through the Reference Material link.

## Intended Audience

This document is useful to any person who uses PeriView to interact with the Processing Server systems. It is expected that you complete the training programs conducted as part of the initial system installation. In addition, it is important to be familiar with site-specific procedures relating to the Processing Servers. Basic knowledge of the Solaris and/or Windows 2000 operating system(s) is assumed.

## How to Use This Manual

This manual uses many standard terms relating to computer system and software application functions. However, it contains some terminology that can only be explained in the context of the Avaya Media Processor Server (Avaya MPS) system. Refer to the *Glossary of Avaya MPS Terminology* for definitions of MPS specific terms.

Initially, you should read this manual at least once, from start to finish. Later, you can use the Table of Contents to locate topics of interest for reference and review.

If you are reading this document online, use the cross-reference links (shown in blue) to quickly locate related topics. <LEFT> click once with your mouse while positioned with your cursor over the cross-reference link. Click on any point in a Table of Contents entry to move to that topic. Click on the page number of any Index entry to access that topic page.

To familiarize yourself with various specialized textual references within the manual, see ***Conventions Used in This Manual*** on page xii.

Periphonics is part of Avaya. The name Periphonics, and variations thereof, appear in this manual only where it is referred to in a product. (For examples, a PeriProducer application, the `PERImps` package, the **`perirev`** command, etc.)

## Organization of This Manual

This manual contains eight chapters which familiarize you with the PeriView, and 2 appendices that give detailed information on more technical topics.

### Chapter 1 — Working with Periview

This chapter introduces you to the PeriView tool. It helps you in understanding the suite of graphical tools that Periview offers to administer, operate and control the Avaya Media Processing Series (Avaya MPS).

### Chapter 2 — User Manager

This chapter allows you to understand the working of the User Manager. It also briefly explains the procedure to add/delete accounts and change user/group privileges and properties.

### Chapter 3 — Application Configuration

This chapter helps you to understand the usage of the Configure Applications tool to create a file that defines the execution parameters and the run-time environment for an application.

### Chapter 4 — Application Manager

This chapter introduces you to the Application Manager (also known as APPMAN) tool. It also helps you in understanding the usage of the APPMAN tool to manage applications in the network.

### Chapter 5 — Status Tools

This chapter helps you to use the Status tools to monitor the activity in the environment. It helps you in monitoring the application phone line status with a set of graphs that you launch using the tree objects.

### Chapter 6 — MPS Control Center

This chapter introduces you to the rich set of tools provided by the MPS Control Center.

### Chapter 7 — Alarm Viewer

This chapter provides information on how to use the Alarm Viewer to view the live and logged alarms. It also provides an insight into the Alarm filter tool.

### Appendix A — Netscape for Solaris Installation

This appendix provides you the details for installing Netscape and Java plug-in.

## Conventions Used in This Manual

This manual uses different fonts and symbols to differentiate between document elements and types of information. These conventions are summarized in the following table.

**Conventions Used in This Manual  Sheet 1 of 2**

| Notation | Description |
|---|---|
| Normal text | Normal text font is used for most of the document. |
| *important term* | The Italics font is used to introduce new terms, to highlight meaningful words or phrases, or to distinguish specific terms from nearby text. |
| **system command** | This font indicates a system command and/or its arguments. Such keywords are to be entered exactly as shown (i.e., users are not to fill in their own values). |
| **command**, **condition** and **alarm** | Command, Condition and Alarm references appear on the screen in magenta text and reference the *Command Reference Manual*, the *PeriProducer User's Guide*, or the *Alarm Reference Manual*, respectively. Refer to these documents for detailed information about **Commands**, **Conditions**, and **Alarms**. |
| file name / directory | This font is used for highlighting the names of disk directories, files, and extensions for file names. It is also used to show displays on text-based screens (e.g., to show the contents of a file.) |
| on-screen field | This font is used for field labels, on-screen menu buttons, and action buttons. |
| <Key Name> | A term that appears within angled brackets denotes a terminal keyboard key, a telephone keypad button, or a system mouse button. |
| *Book Reference* | This font indicates the names of other publications referenced within the document. |
| cross reference | A cross reference appears on the screen in blue text. Click on the cross reference to access the referenced location. A cross reference that refers to a section name accesses the first page of that section. |
| ☞ | The Note icon identifies notes, important facts, and other keys to understanding. |
| ⚠ | The Caution icon identifies procedures or events that require special attention. The icon indicates a warning that serious problems may arise if the stated instructions are improperly followed. |

**Conventions Used in This Manual Sheet 2 of 2**

| Notation | Description |
|---|---|
|  | The flying Window icon identifies procedures or events that apply to the Windows 2000 operating system only. [1] |
| SOLARIS | The Solaris icon identifies procedures or events that apply to the Solaris operating system only. [2] |

(1): Windows 2000 and the flying Window logo are either trademarks or registered trademarks of the Microsoft Corporation.
(2): Solaris is a trademark or registered trademark of Sun Microsystems, Inc. in the United States and other countries.

## Solaris and Windows 2000 Conventions

This manual depicts examples (command line syntax, configuration files, and screen shots) in Solaris format. In certain instances Windows 2000 specific commands, procedures, or screen shots are shown where required. The following table lists examples of general operating system conventions to keep in mind when using this manual with either the Solaris or Windows 2000 operating system.

|  | Solaris | Windows 2000 |
|---|---|---|
| Environment | `$MPSHOME` | `%MPSHOME%` |
| Paths | `$MPSHOME/common/etc` | `%MPSHOME%\common\etc` |
| Command | **`<command> &`** | **`start /b <command>`** |

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1

# Working with PeriView

**<u>This chapter covers:</u>**

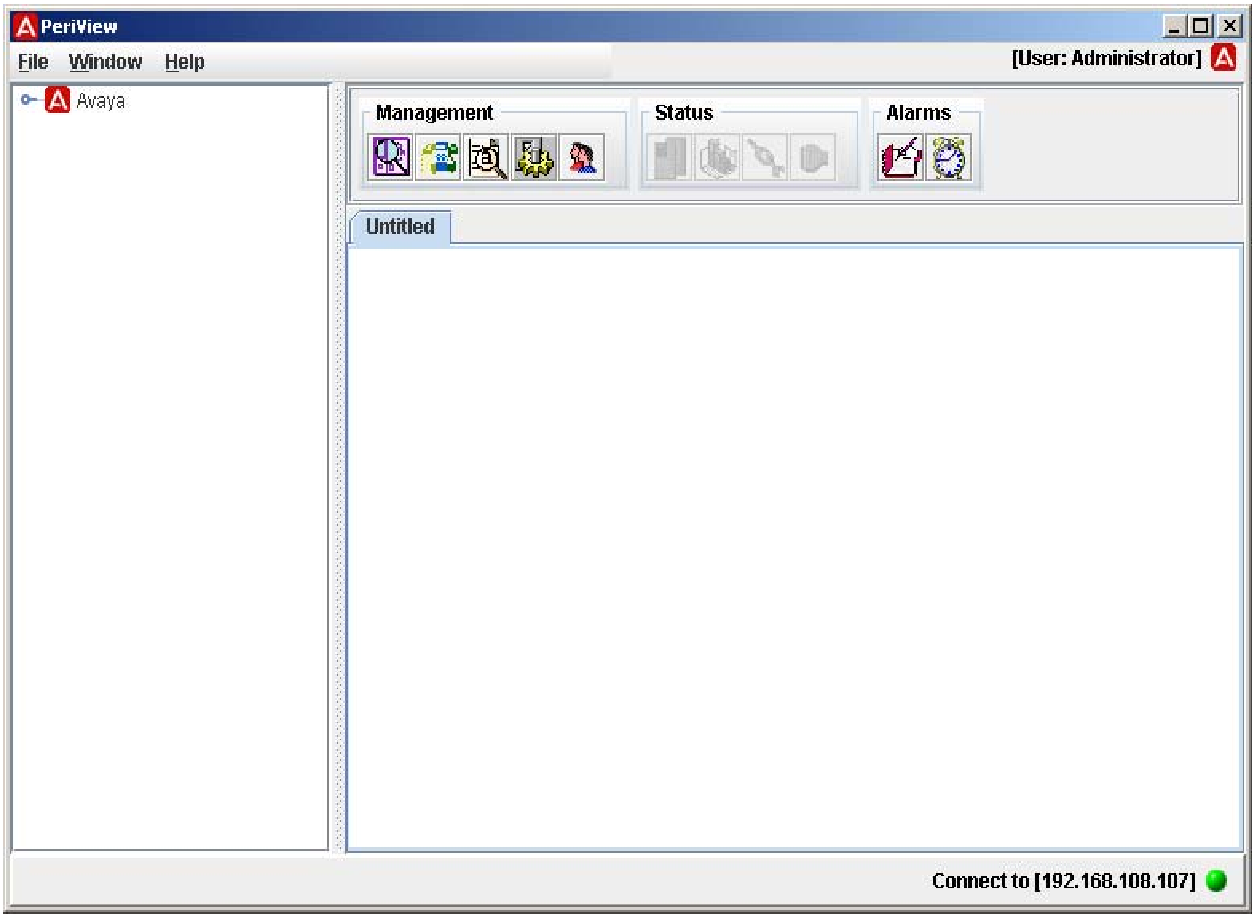
1. **Introduction to PeriView**
2. **PeriView Work Environment**
3. **Start PeriView and Login**
4. **Understanding PeriView**
5. **Navigating PeriView**
6. **Tree Objects and their States**
7. **Browser based PeriView and the Java Cache**

## Introduction to PeriView

PeriView is the suite of graphical tools that you use for administration, operation, and control of the Avaya Media Processing Server ( Avaya MPS) Series.

PeriView can be used to manipulate and view network activity and to develop and maintain applications in a GUI (Graphical User Interface) environment. The palate of tools display on the tool bar when you log onto PeriView.

PeriView provides for distributive control over network activity. It lets you define virtual environments and operate within them.



The PeriView plugins are as follows:

- Application Configuration

  The Application Configuration tool is used to create the file that defines an application's execution parameters and run-time environment.

- Application Management

  The Application Management tool is used to manage applications in the network.

- User Manager

  The User Manager tool allows the PeriView administrator (or a PeriView user with administrative privileges) to add/delete accounts, and change user/group privileges and properties.

- MPS Control Center

  The MPS Control Center tool is used to display the PeriView configuration utilities.

Each tool is launched individually. To work with multiple tools, the tools can be launched sequentially. Each tool offers a wide range of customization.

Once you launch a tool, you can minimize it and restore it to view when you need it. This flexibility permits simultaneous interaction with multiple PeriView operations and allows for network awareness and control in the operating environment. For example, you can view alarms in the Alarm Viewer and monitor applications in the Activity Monitor while you are assigning, starting, or terminating applications.

# PeriView Work Environment

The MPS systems consists of the hardware and software required to support interactive call processing functions for both voice and Web (Internet) interaction.

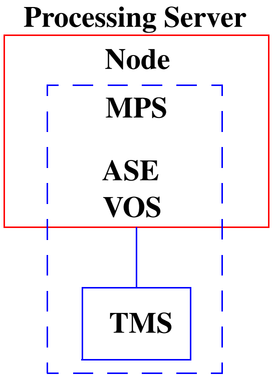
## Configurations and Naming Conventions

The following description illustrates the MPS system concepts and naming conventions used in the PeriView Reference Manual and Quick Start Guide.

### Single Processing Server

A single node is the building block in the Processing Server configuration. It is configured with one MPS component which consists of:

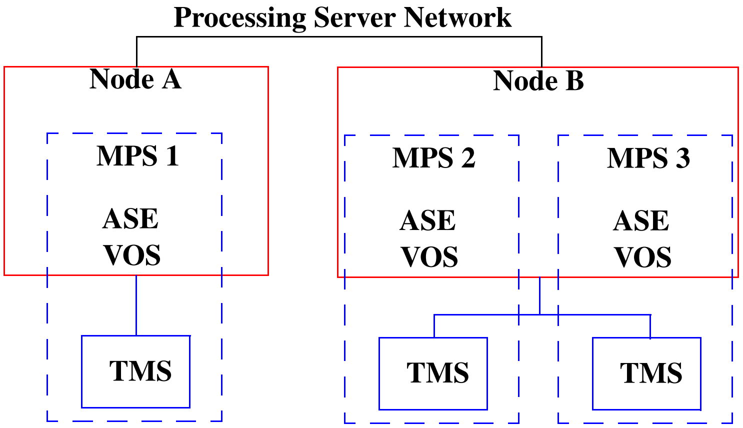
- TMS (Telephony Media Server) hardware.
- ASE (Application Services Environment) and the VOS (Voice Operating Software) software processes executing on a node.



### MPS Network Configuration

The following diagram illustrates a two node MPS configuration. It consists of a node configured with one MPS component and a node configured with two MPS components. Each node is identified by a node name (A and B) and each MPS is identified by an MPS number (1, 2, & 3) that must be unique across all nodes.

Typically, statistics collection and processing is performed only on one node in a multi-node environment. PeriView tools reside on each node. However, PeriReporter Tools typically reside only on the node designated for statistics collection and processing (Node B in this diagram). You can launch any of PeriView's tools from any node, except for PeriReporter Tools. You can launch PeriReporter Tools only from the node designated for statistical collection and reporting.



## Components in the MPS

MPS can consist of one or more nodes. Components provide specific functionality to the network and reside on nodes. A node provides the central point of control for the components that reside on the node. While it is possible to configure a node without components (a specific functionality), all nodes are PeriView workstations from which you can launch the suite of PeriView tools.

### Types of Components

The types of components that can be configured in MPS environment are summarized on the following table.

| Component | Description |
|---|---|
| MPS | An MPS (Media Processing Series) component provides full interactive call processing functionality with a programmable switching fabric in an integrated system.<br>The MPS component provides telephone services and is capable of application processing. It is equipped with the telephony required to interact with applications to process calls. |
| OSCAR | An OSCAR (Open Signal Computing and Analysis Resource) component provides external resource services such as speech recognition and speech synthesis.<br>The OSCAR component functions in conjunction with a component that provides the telephony and application services required for call processing. |
| CCSS | A CCSS (Common Channeling Signal Server) component that provides SS7 (Signalling System 7) and C7 support to the Process Server product line. |

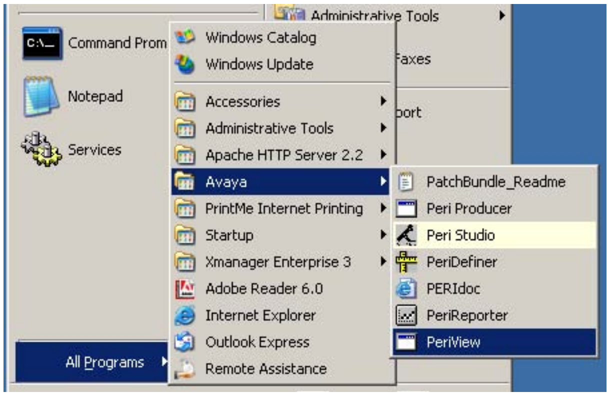
| Component | Description |
|---|---|
| VAPI | A VAPI (Voice Application Programming Interface) component is associated with the CTI product line. VAPI components make-up the connection between VRU (Voice Response Unit) applications and the CTI Server.<br>The CTI Server can be the CallSPONSOR Server (CSS) or the vendor's server. VAPI component's include: GTS VAPI -- Genesys Tserver. The VAPI and GTS TLS interface provides a set of request messages that can be used by applications to access the Genesys Tserver's services. |
| TMSCOMM | The TMSCOMM component provides network control and telephony bridging functions across components and nodes in a Processing Server environment. |

## Start PeriView and Login

### Client Based

#### Startup

Start client-based PeriView by selecting Start > Programs >Avaya > PeriView.



### Browser Based

#### Startup

Start browser-based PeriView in the following manner:

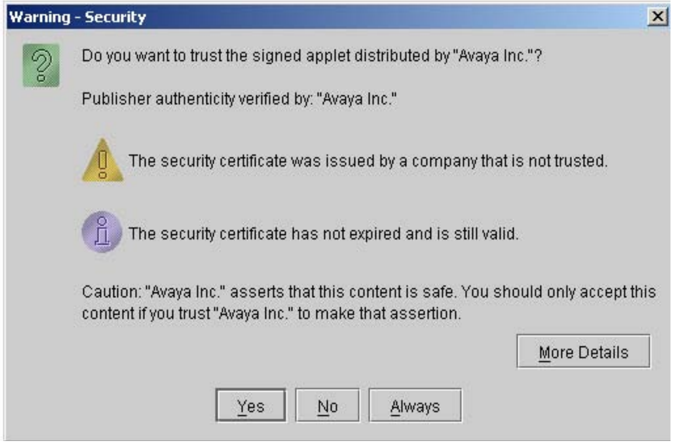
Use the URL http://<your web server node name here>/periview/PeriView.html

Updates/changes to PeriView may not always appear when using the browser-based PeriView. See ***Browser-based PeriView and the Java Cache*** on page 23.

### Using PeriView for the first time

When using PeriView in browser mode for the first time from a system, a Security Warning dialog immediately appears when the browser is pointed to the PeriView's URL.

☞ If the system does not have the required Java plug-in, then the plug-in will be loaded first before the dialog is displayed.



Warning - Security

Do you want to trust the signed applet distributed by "Avaya Inc."?

Publisher authenticity verified by: "Avaya Inc."

The security certificate was issued by a company that is not trusted.

The security certificate has not expired and is still valid.

Caution: "Avaya Inc." asserts that this content is safe. You should only accept this content if you trust "Avaya Inc." to make that assertion.

Choosing to accept PeriView to run as a trusted applet, using options ‘Yes’ or ‘Always’, ensures that the applet has access to system resources in a secure environment.

If you choose ‘Yes’, PeriView runs as a signed applet for the current browser session only. If you want PeriView to always run as a trusted applet, choose ‘Always’ in the security dialog.

☞ Avaya recommends you to choose the ‘Always’ option.

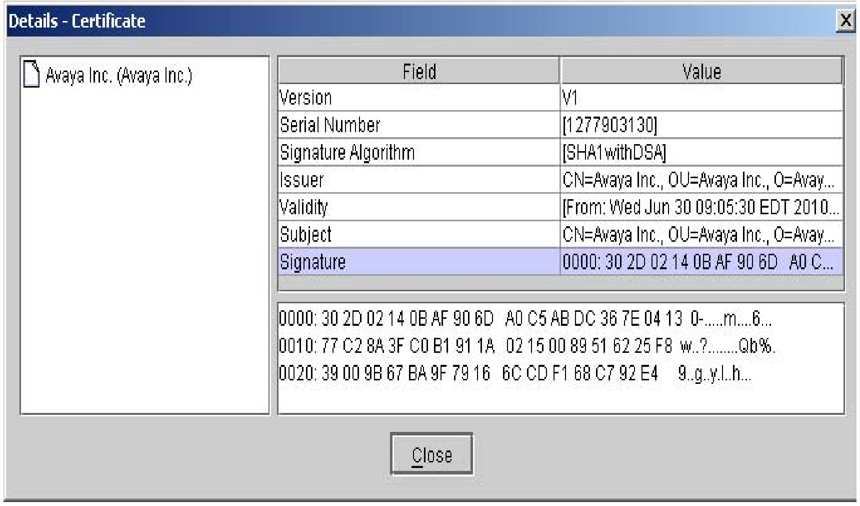
Choosing the ‘Always’ option prevents the security warning dialog from appearing the next time you use PeriView from the same system.

If you decide not to accept the security dialog, PeriView would then run as an unsigned Java applet. Running PeriView in an unsigned mode will result in security restrictions and exceptions.

☞ Avaya recommends you not to choose the ‘No’ option.

Clicking on ‘More Details’ will open up a modal screen. This screen will display information about the certificate associated with the signed applet. Clicking ‘Close’ will return you to the security dialog

.



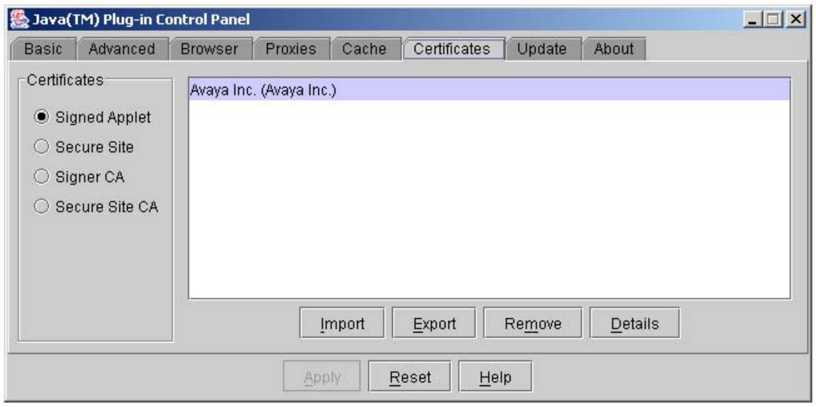
Avaya Inc. (Avaya Inc.)

| Field | Value |
|---|---|
| Version | V1 |
| Serial Number | [1277903130] |
| Signature Algorithm | [SHA1withDSA] |
| Issuer | CN=Avaya Inc., OU=Avaya Inc., O=Avay... |
| Validity | [From: Wed Jun 30 09:05:30 EDT 2010... |
| Subject | CN=Avaya Inc., OU=Avaya Inc., O=Avay... |
| Signature | 0000: 30 2D 02 14 0B AF 90 6D  A0 C... |

```
0000: 30 2D 02 14 0B AF 90 6D   A0 C5 AB DC 36 7E 04 13  0-.....m....6...
0010: 77 C2 8A 3F C0 B1 91 1A   02 15 00 89 51 62 25 F8  w..?.......Qb%.
0020: 39 00 9B 67 BA 9F 79 16   6C CD F1 68 C7 92 E4     9..g..y.l..h...
```

You can check if PeriView's certificate has always been accepted for the system, (using the ‘Always’ option), by going to the Java Plugin Control Panel. Selecting the Certificates tab will display a list of certificates associated with signed applets that can run on your system.

You can see only the certificates that are persistent on your system. You can view the certificate for PeriView on your system only if you choose the ‘Always’ option.



Certificates

● Signed Applet
○ Secure Site
○ Signer CA
○ Secure Site CA

Avaya Inc. (Avaya Inc.)

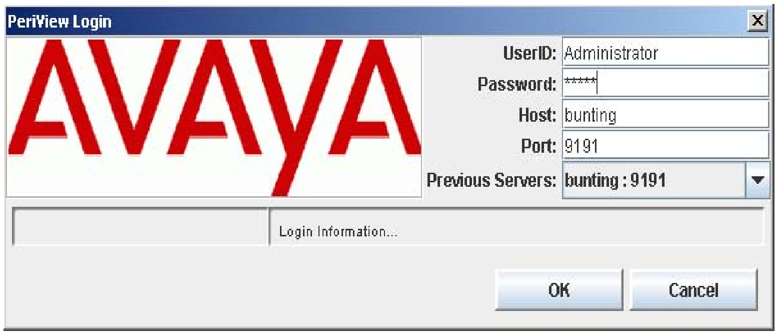
You can remove a certificate by selecting the Remove button. Once a certificate has been removed, you will encounter the Security Dialog the next time you point your browser to PeriView's URL.

Avaya strongly recommends you not to remove certificates.

## Login

At the login screen, perform the following steps

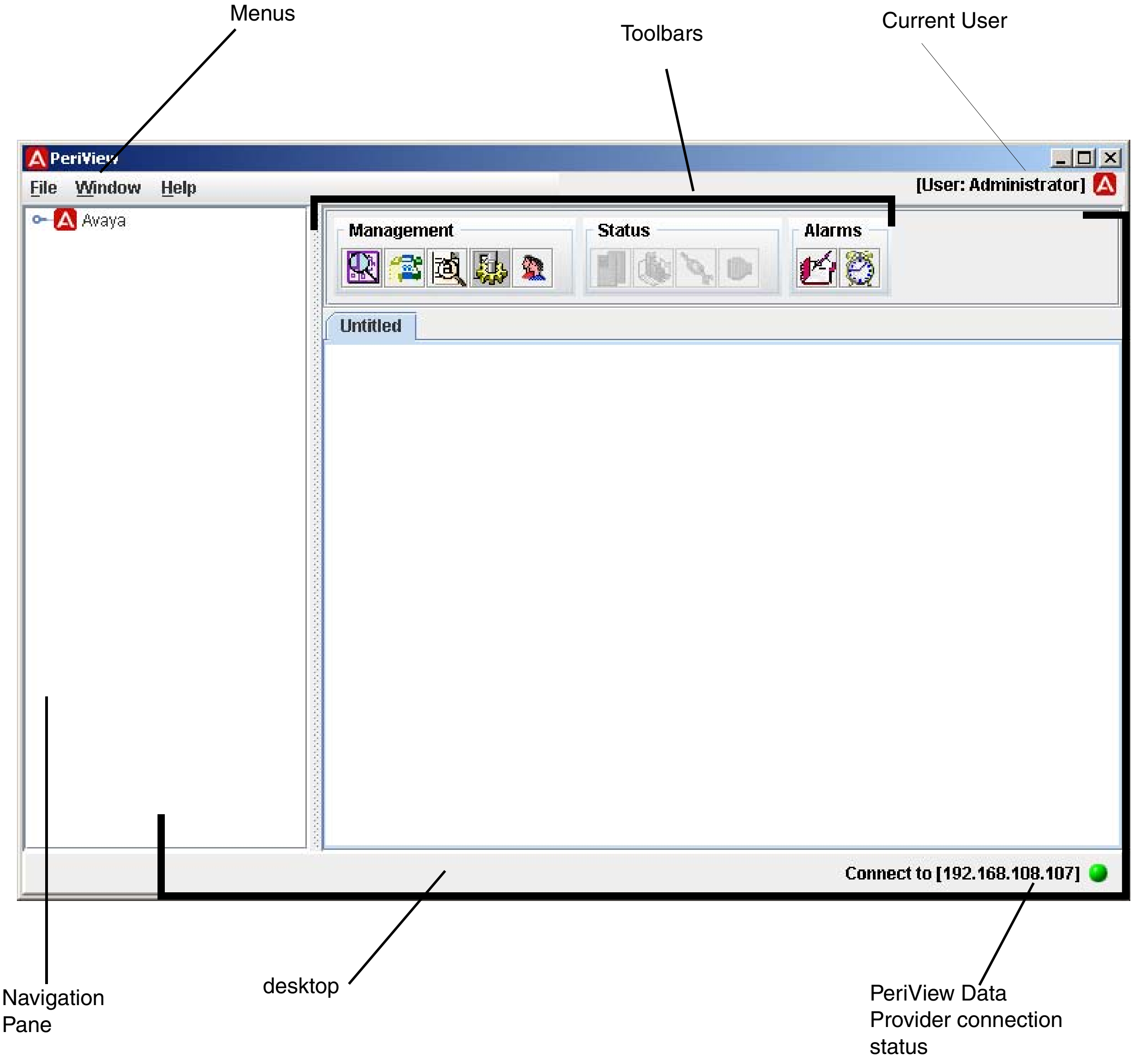
- Type the UserID and Password.
- Choose the Host and Port number.
- Click OK.



UserID: Administrator
Password: *****
Host: bunting
Port: 9191
Previous Servers: bunting : 9191

Login Information...

## Understanding PeriView



## Navigating PeriView

### Toolbars

The PeriView toolbars offer shortcuts to frequently used tools in PeriView. Click on a button to open the window.

### Menus

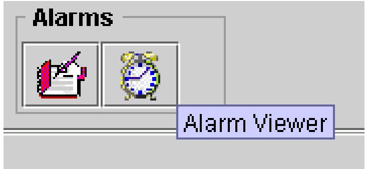
Click on a menu to access menu options. Certain menu options are disabled incase, certain conditions are not satisfied. For example, the `Close` option in the `File` menu is only available if a window is open on the desktop. If a window is not open, then the Close option is greyed out.

### Right-click Menus

Some windows use right-click menus. Right-click menus offer shortcuts to options within a window. The Navigation Pane also uses right-click menus. Use the right-click menus in the Navigation Pane to expand attributes or properties of a domain, line, node, application, component, span, or procedure.

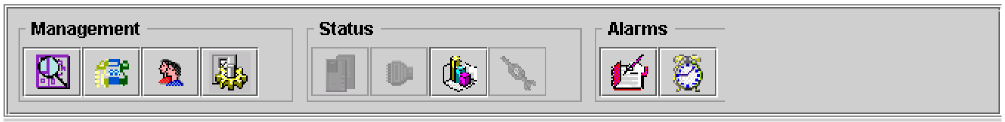
### Screen Tips

Screen tips are the informative pop-ups that are displayed in the Navigation Pane when the mouse is pointed on a certain icon. For example, when you point the mouse over the Alarms Viewer icon, an informative pop up is displayed as shown below.



## PeriView Toolbars

PeriView has three toolbars: Management, Status, and Alarms.



### Management Toolbar

| Button | Button label | Tool Description |
|---|---|---|
| | MPS Control Center | Use the **MPS Control Center** tool to configure certain aspects of the MPS, including MMF files, the vos.cfg file, the vpshosts file and create Clusters. |
| | PeriView Log Viewer | Use the **PeriView Log Viewer** tool to view the PeriView logs when needed. This plug-in is only applicable for client-based PeriView (namely, not available for browser PeriView).Information is displayed for each fault occurrence and includes the date, time, application name, component, and line number associated with the incident. |
| | Application Configuration | Use the **Application Configuration** tool to configure an application's runtime environment parameters. |
| | Application Management | Use the **Application Management** tool to manage application and phone line resources. |
| | User Manager | Use the **User Manager** tool to define User and Group logon names and descriptions. |

### Status Toolbar

| Button | Button name | Tool Description |
|---|---|---|
| | Host Status | Use the **Host Status** tool to display the status of an external host. You can select to display host status based on either the VT number or the phone line number, with which the VT is associated. |
| | Line Status | Use the **Line Status** tool to display phone line activity for components, phone lines, and applications. |

| Button | Button name | Tool Description |
|---|---|---|
| | Linked Apps Status | Use the **Linked Application** tool to monitor phone line status of a currently executing main application and its linking activity, if any. Linking activity represents the activity between the main application and the linked applications, to which it links, during its execution cycle. |
| | Span Status | Use the **Span Status** tool to display the state of digital spans (physical phone lines), graphically, on a per component basis. |

## Alarms Toolbar

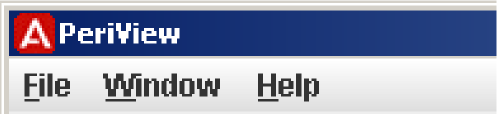
| Button | Button name | Tool Description |
|---|---|---|
| | Alarm Filter | Use the **Alarm Filter** tool to define alarm filtering properties. Filtering allows you to control the alarms that display and are logged. |
| | Alarm Viewer | Use the **Alarm Viewer** tool to view live and logged alarms. |

## PeriView Menus

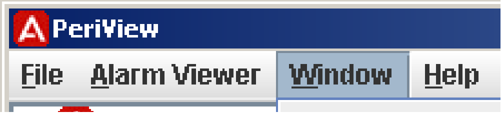
PeriView has a dynamic menu system. This means that as some new windows become active, a new menu corresponding to that window will appear.

The windows which will cause new menus to appear are the USER MANAGER and the ALARM VIEWER windows.

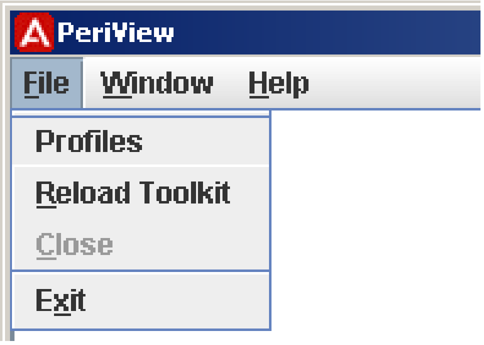
For example: The default menus are File, Window, and Help.



If the ALARM VIEWER window is open and active, the following menu will appear.



### The File Menu



Use the File menu to work with Profiles, Reload the toolkit, Close the current window, or Exit PeriView.

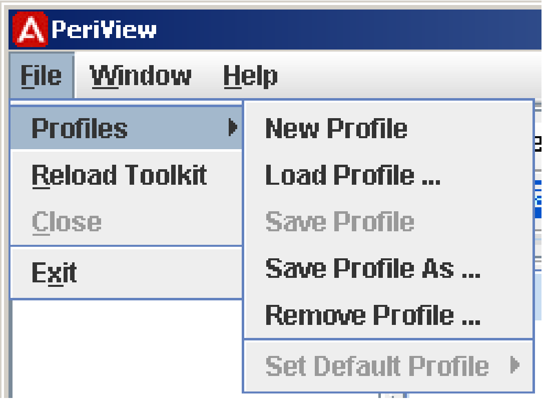
#### Profiles

PeriView allows users to save opened plugins as profiles. A user's profile contains the plugins and their related information that you often use. These profiles, when saved, can be loaded whenever required and saves time.

☞ It is recommended to save the commonly used plugins into a profile.

To save the plugins open in PeriView's canvas as a profile,

1. Select "Profiles" from File menu
2. Select "Save Profile As" to save the plugins that you open in PeriView's canvas. Give a name to the profile.



To load a saved profile,

1. Select "Profiles" from the File menu
2. Select "Load Profile" and select the name of the profile that you want to load.
3. Click the "Load" button to load the selected profile.

If a profile fails to load, it will not affect PeriView. It will not open the plugins that are previously saved in the profile.

To add additional plugins to your profile, select the "Save Profile" and update the profile. This option is enabled only after you load a profile.

To remove a saved profile,

1. Select "Profiles" from the File menu
2. Select "Remove Profile" and select a profile. Click OK to remove the selected profile.

To load a profile automatically when PeriView starts, you can select the profile as default via Profile menu.

1. Select "Profiles" for the File menu.
2. Select "Set Default Profile".
3. Select a profile to be automatically loaded at PeriView start.

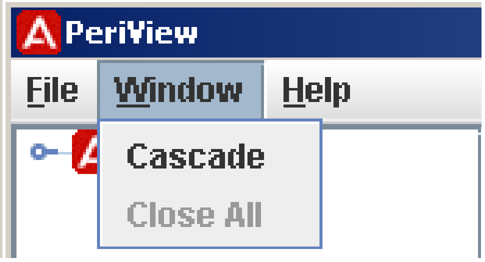
Profiles are user-specific. Namely, each user will have his/her own profile(s). Profiles are not sharable between users.

Using the mouse, <Right-Click> on a tab to show up menu for further options.

### Reload Toolkit

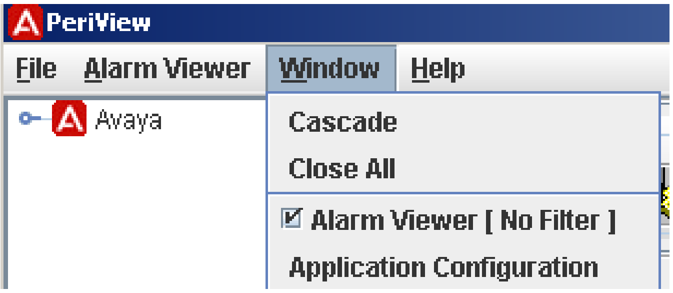
This menu item is used to refresh the toolkit icons. If a new plug-in has been added to PeriView, clicking on Reload Toolkit will make the new item appear in the toolkit, as opposed to exiting PeriView and logging back in.

## The Window Menu



Use the Window menu to specify how to view open windows, close all open windows and which open window to view on top.

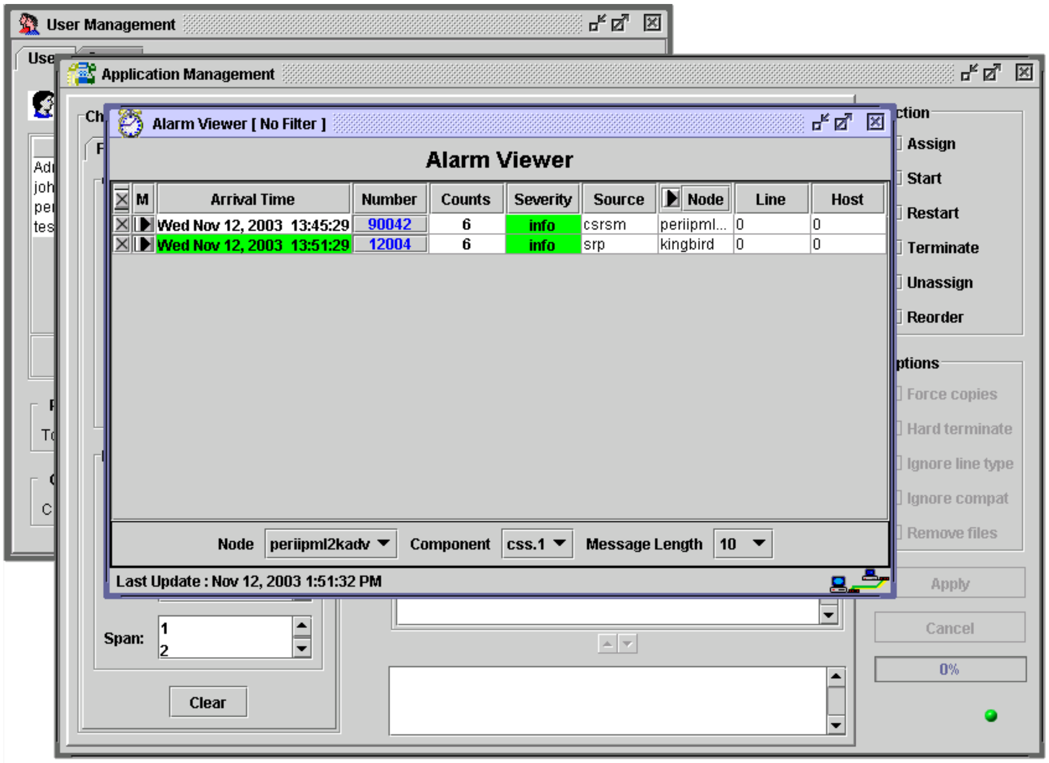
When a window is open it will appear in a list in the Window menu. The window which is currently active will appear at the top of the list with a checkmark next to it. All other windows will be listed in the order they are layered on the desktop, front to back.



To choose another window to become active, click on the corresponding name in the Window menu.

### Cascade

Cascade arranges the open windows one over the other as shown below.



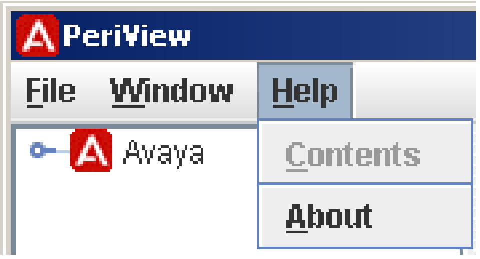
| ☒ | M | Arrival Time | Number | Counts | Severity | Source | Node | Line | Host |
|---|---|---|---|---|---|---|---|---|---|
| ☒ | ▶ | Wed Nov 12, 2003 13:45:29 | 90042 | 6 | info | csrsm | periipml... | 0 | 0 |
| ☒ | ▶ | Wed Nov 12, 2003 13:51:29 | 12004 | 6 | info | srp | kingbird | 0 | 0 |

Node periipml2kadv Component css.1 Message Length 10

Last Update : Nov 12, 2003 1:51:32 PM

Span: 1 2

### The Help Menu



Use the Help menu to learn the release version and date of PeriView currently being used.

## The Navigation Pane

The Navigation Pane offers a visual representation of *lines, clusters, spans, domains*, *nodes*, *components*, and *applications*.

### Lines

Line objects represent the phone lines that are associated with the application. A component can have multiple lines assigned to it. The line objects display as blue, green or yellow when you expand them in the workspace.

A blue line indicates that the line is assigned, a green line indicated that the phone line is assigned and running whereas a yellow line indicates that the line is vacant without any applications running.

### Clusters

A cluster is a collection of nodes. These nodes, contain various MPS components. The clusters basically make the classification and identification of nodes easier.

### Spans

Span indicates a single digital connection. For domestic (T1) systems, each span can support 24 phone lines. For European (E1) systems, each span can support 30 phone lines.

### Domains

A domain is a collection of components and nodes that represent either the entire MPS network or a portion of the network and display in as hierarchical tree structure in the workspace. Tree objects display as **green**, **red**, or **black** when you expand them in the workspace.

The domain object represents all components in the MPS network. When you manipulate a domain object, you control network activity from the domain perspective and focus control of PeriView tools at the domain level. The default domain is named “Avaya”.

### Nodes

Each node object represents a unique UNIX machine defined for the MPS network. A node can be configured with a single component or as a PeriView workstation.

You can expand a domain or group object by node to display network activity from the node perspective and focus control of PeriView tools at the node level.

### Components

Each component object represents an individual component that is defined in the **`vpshosts`** file.

You can expand a domain or node object by component to display network activity from the perspective of its components and focus control of PeriView tools at the component level.

### Applications

Each application object represents a unique application, which indicates the number of instances of the application that are assigned to phone lines. Application expansion displays network activity from the application perspective and focuses control of APPMAN tools at the application level. Once you assign applications, you can expand tree objects by application, then view and manipulate.

You can expand an application to display all lines to which it is assigned for processing. When you expand a component from an application, control is distributed only over the phone lines associated with the application being processed by that component.

Application objects display the application name and the number of phone lines to which the application has been assigned. Applications are displayed as stateless in **purple**. The line objects that are assigned and running display as **green** objects. The line objects that are assigned but are not running display as **blue** objects.

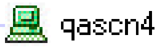
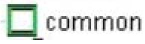
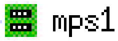
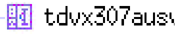
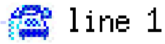
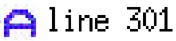
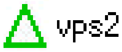
# Tree Objects and Their States

## Tree Objects

Network entities display as objects, in a hierarchical tree structure, in the workspace of the main PeriView navigation pane and the Application Manager. The type of objects that actually display depend on the network configuration and tree object definitions.

Domain tree objects represent nodes, components, phone lines, spans, and applications that display their state by their color, in near real-time. The state of an object is determined by SRP (Startup and Recovery Process) and reported in the SRP Status report (`srp -status`).

**PeriView Tree Object Summary  Sheet 1 of 2**

| Object | Name | Description |
|---|---|---|
|  qascn4 | Node | Each node tree object represents an individual node that is defined for the network. |
|  common | Common Component | The Common Component tree object runs on every node. It is responsible for any operation common to the node such as alarm collection and file access. |
|  mps1 | MPS | An MPS tree object represents a network component that provides telephone services and is capable of application processing. For additional information about MPSs, see ***Expand and Collapse the Tree*** on page 115. |
|  tdvx307aus | Application | An application object represents an individual application that runs on the MPS. |
|  line 1 | Phone Line | A Phone Line object represents a physical (or logical) phone line which is running the application listed above it in the PeriView tree. |
|  line 301 | Admin Line | An Administrative Line object represents a physical (or logical) phone line which is running an administrative application. Administrative lines do not typically handle calls. Currently, the admin applications work up to line 512. To get more than 512 lines, run `vmst` with the `-p` option. |
|  vps2 | VPS | A VPS tree object represents the older Periphonics telephony system. A VPS functions similarly to an MPS. |

**PeriView Tree Object Summary  Sheet 2 of 2**

| Object | Name | Description |
|---|---|---|
| tmscomm: | TMSCOMM | The TMSCOMM tree object represents the network component that provides network control and telephony bridging functions across components and nodes in a Avaya Media Processing Server Series Release 1.0 product. |
| oscar12 | OSCAR | An OSCAR tree object represents a network component that provides external resource services (speech synthesis and recognition). It functions in conjunction with a MPS, which provides telephony and application services.<br>• For detailed information about OSCAR resource processing, refer to the *OSCAR Reference Guide*. |

## Tree Object States

When you launch the Application Manager or the Line Status, these tools attempt to contact specific software processes periodically. The information returned by the contact, or the lack of contact, is projected by the color of tree objects assigned to the domain in the workspace.

Tree objects represent network entities.

State is a representation of a PeriView tool attempting to contact some software process.

- In the case of tree objects, PeriView tools (PeriView Launcher, Application Manager and Activity Monitor) attempt to contact **srp** (Startup and Recovery Process).
- In the Activity Monitor:
  - Graphs attempt to contact TMS (Telephony Media Server).
  - The Component Host Status tool attempts to contact `commgr` (Communications Manager).

Object states include: **Unreachable** (**black**), **Down** (**red**), or **Up** (**green**). The **Down** state supersedes the **Unreachable** state for domains and nodes because they represent states collectively. (The domain represents all objects associated with the components defined in the `vpshosts` file. A node represents all objects associated with the components configured for that node.)

An **Unreachable** state does not necessarily indicate a problem. It implies, only, that no information is available for an object. A **Down** state indicates that information is available and the component is **Down**.

There are specific conditions that determine when an object displays in an **Unreachable**, **Down**, or **Up** state.

The actual meaning of the states these colors represent is dependent on the type of tree object you are looking at.

## Browser-based PeriView and the Java Cache

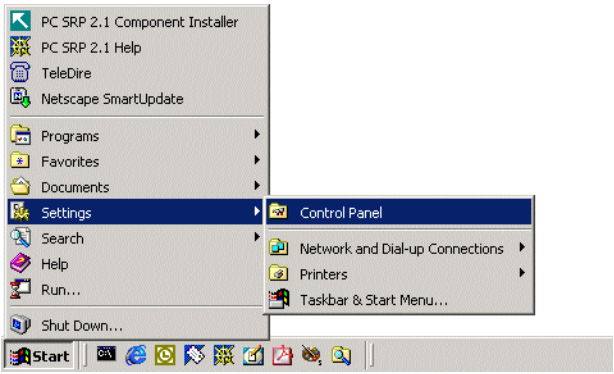
When PeriView is accessed by a web browser, the Java files (`.class` and `.jar`) are typically copied to a local Java file cache. Putting these files in a local cache speeds loading the next time the web page (PeriView) is accessed.

This caching may prevent PeriView updates/changes from appearing the next time you start PeriView from the browser. For example, you apply a PeriView patch which adds a new menu option. The next time you use PeriView in the browser, you may not see the new menu option. The browser is using the cached (older) version. Similar behavior may occur if you access one version of PeriView on a system, then use the browser to access a different version of PeriView on a different system.

The Java files are cached by a Java plug-in. The cache much be cleared using the Java plugin Control Panel. **The cached files cannot be removed by clearing the browser cache**. To clear the Java cache:

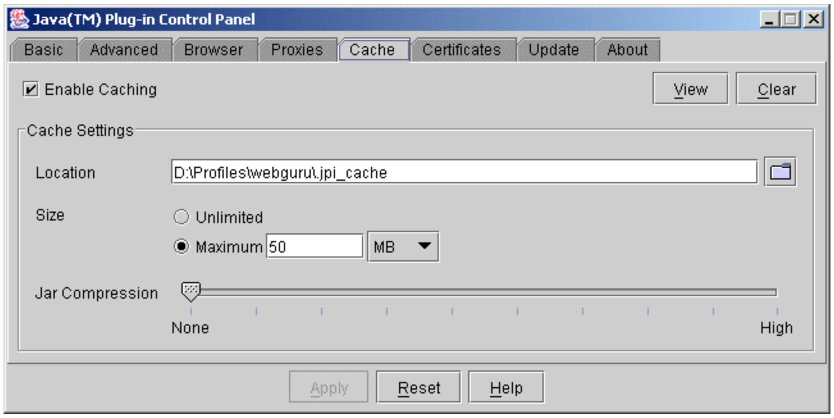
**On Windows 2000 systems:**

**1.** Start > Settings > Control Panel



**2.** Select the Java Plug-In

3. Click on the Cache Tab.



☑ Enable Caching

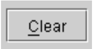
Location D:\Profiles\webguru\.jpi_cache

Size ○ Unlimited

● Maximum 50 MB

Jar Compression None High

4. Click on the Clear button.



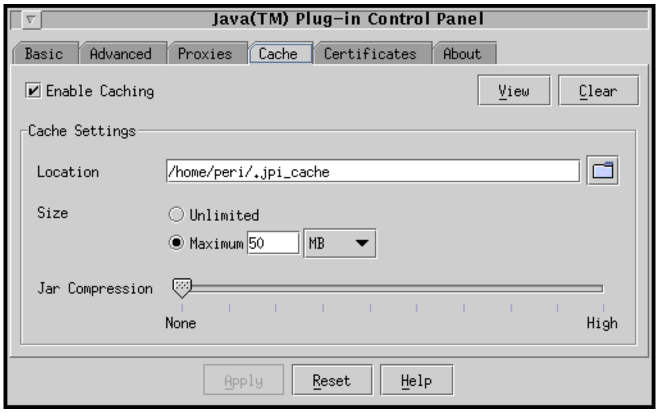
**On Solaris systems:**

1. Change directory to <*Java Runtime Environment Install Dir*>`/bin` (typically `/usr/java/bin`).

2. Start the Plugin Control Panel

```
mps100 {3} ControlPanel
```

3. Click on the Cache Tab



☑ Enable Caching

Location /home/peri/.jpi_cache

Size ○ Unlimited

● Maximum 50 MB

Jar Compression None High

4. Click on the Clear button

PeriView 2.1 supports the Java Runtime Environment version 1.4.1 (and higher).

Consult your browser/platform documentation for Java cache clearing procedures if different from the above.

2

# User Manager

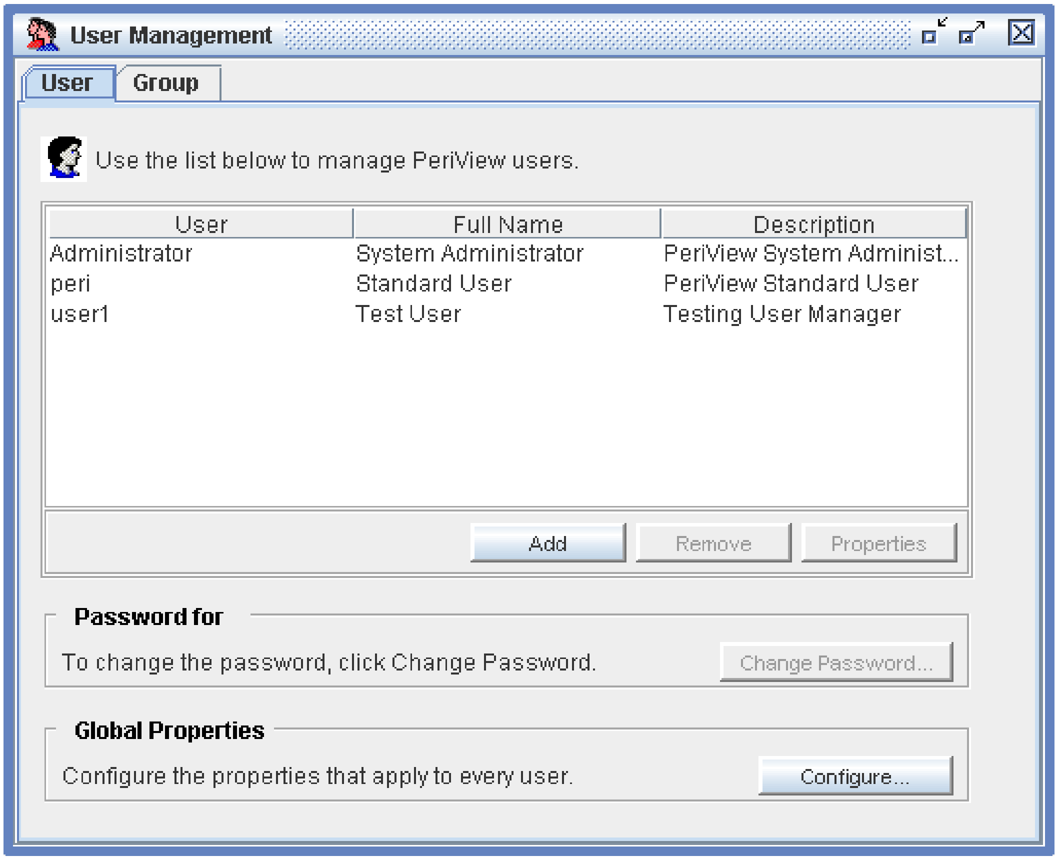
**This chapter covers:**

1. **Launching the User Manager Plugin**
2. **Introduction to User Manager**
3. **User Manager—User tab**
4. **User Manager—Group tab**

## Launching the User Manager Plugin

To launch the User Manager plugin, open the PeriView GUI Main Screen as shown in Introduction to PeriView  on page 2. Click on the User Manager icon as displayed below.

The User Management screen displaying the User Tab appears as follows:



Use the list below to manage PeriView users.

| User | Full Name | Description |
|---|---|---|
| Administrator | System Administrator | PeriView System Administ... |
| peri | Standard User | PeriView Standard User |
| user1 | Test User | Testing User Manager |

Password for

To change the password, click Change Password.

Global Properties

Configure the properties that apply to every user.

## Introduction to User Manager

This chapter describes PeriView's User Manager plugin that allows the PeriView administrator (or a PeriView user with administrative privileges) to add/remove users or groups, and change user/group privileges and properties. If a user and the corresponding groups that the user belongs to, share similar properties, (for e.g., if the domain name for the user is Avaya and that for the group is Avaya), the user's settings takes precedence over the group's settings.

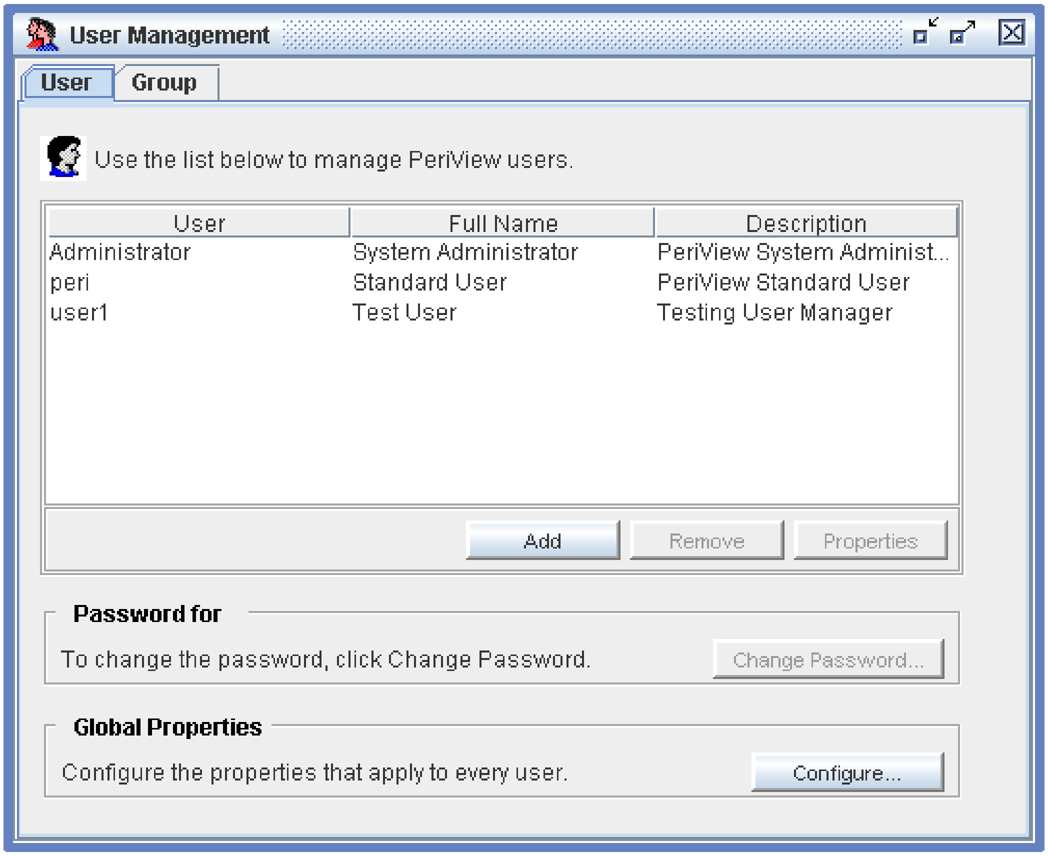
## User Manager—User Tab

The User tab allows the PeriView administrator to:

- Add a new User
- Remove a User
- Setting User Properties
- Setting User Privileges
- Membership Management
- User’s Advanced Properties
- Setting Password
- Configuring Global Properties

### Add a new User

PeriView provides a Graphical User Interface (GUI) to add/remove new users/groups, set/edit properties/privileges for the PeriView user.



Use the list below to manage PeriView users.

| User | Full Name | Description |
|---|---|---|
| Administrator | System Administrator | PeriView System Administ... |
| peri | Standard User | PeriView Standard User |
| user1 | Test User | Testing User Manager |

**Password for**

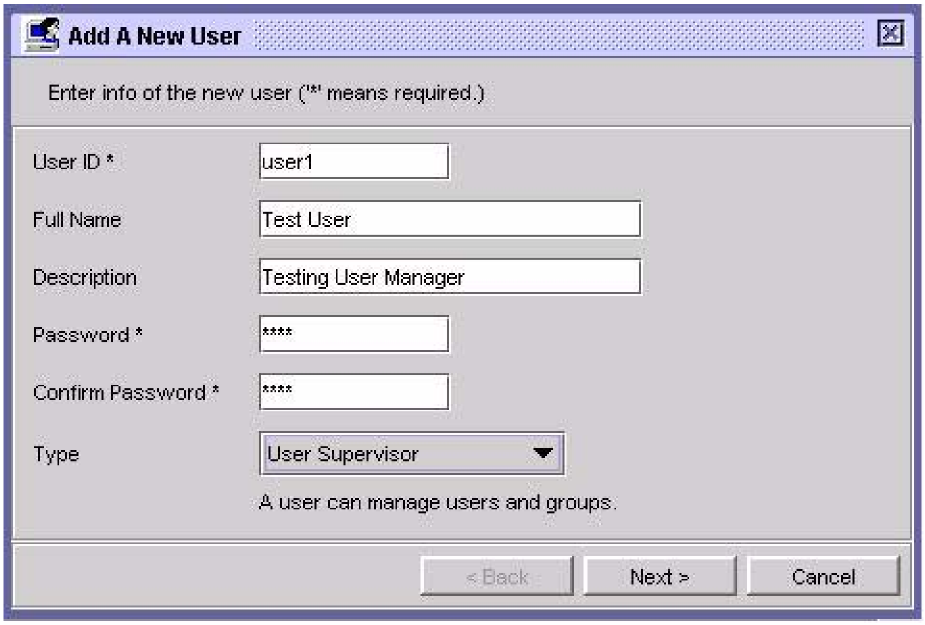
To change the password, click Change Password.

**Global Properties**

Configure the properties that apply to every user.

To add a new user, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Click on the ADD button, to create a new user.



Enter info of the new user ('*' means required.)

User ID * user1

Full Name Test User

Description Testing User Manager

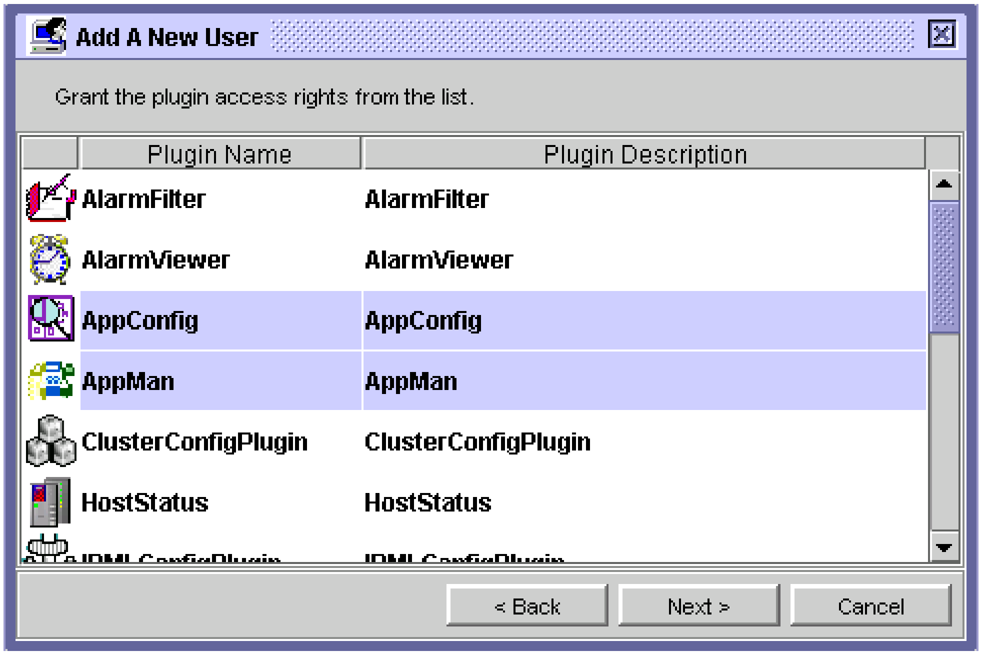
Password * ****

Confirm Password * ****

Type User Supervisor

A user can manage users and groups.

3. Enter a user id for the new user in the `User ID` text box.
4. Enter the Full Name and Description for the new user profile that is being created.
5. Enter the password (mandatory) for the user, and click on NEXT button to grant the plugin access rights to the new user.
6. Select the type of user. The user can be of type, *User Supervisor* and *Normal*.

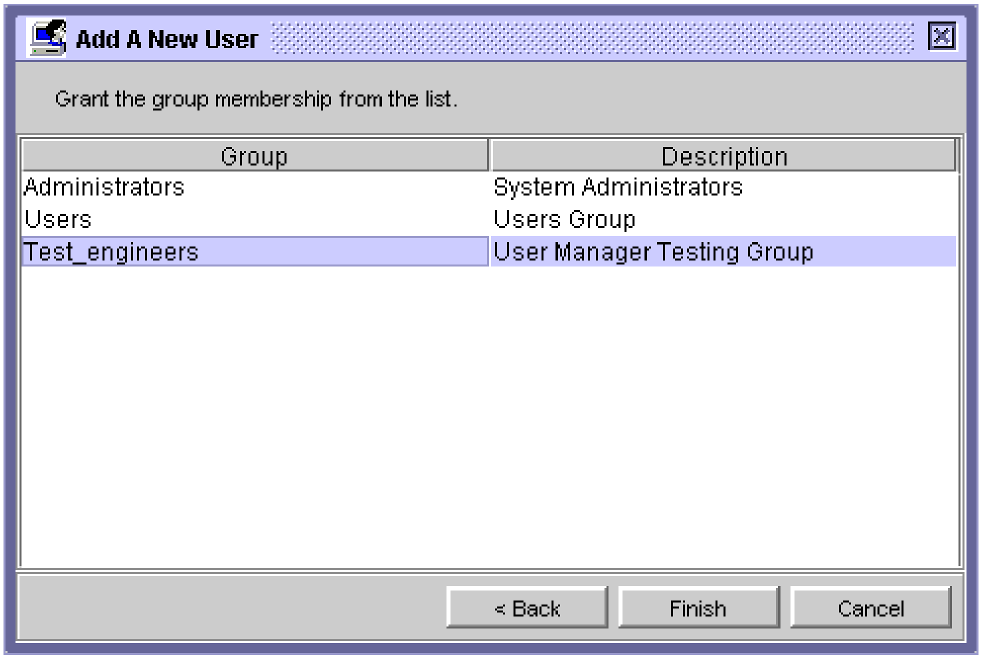


Add A New User

Grant the plugin access rights from the list.

| | Plugin Name | Plugin Description |
|---|---|---|
| | AlarmFilter | AlarmFilter |
| | AlarmViewer | AlarmViewer |
| | AppConfig | AppConfig |
| | AppMan | AppMan |
| | ClusterConfigPlugin | ClusterConfigPlugin |
| | HostStatus | HostStatus |
| | IDMLConfigPlugin | IDMLConfigPlugin |

7. Select the plugins (from the list displayed) to which you wish to grant the access rights. Click on NEXT to grant the user a group membership.



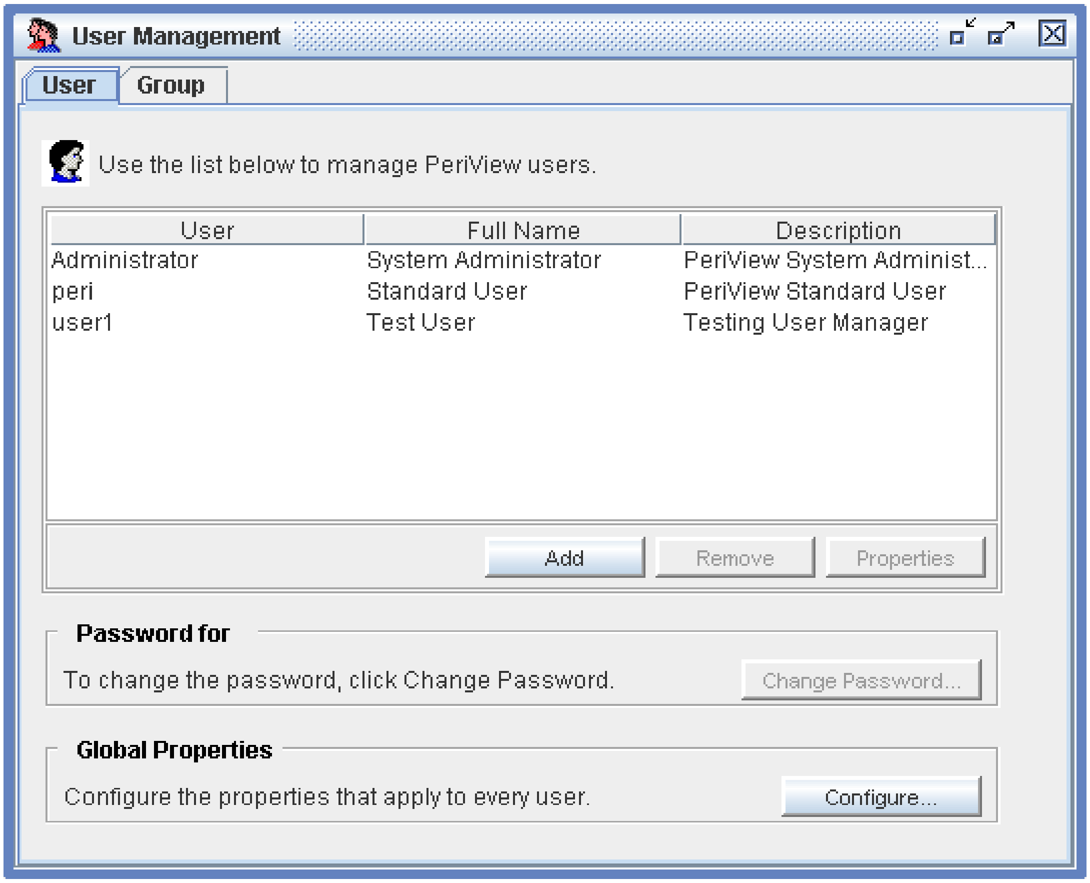
Add A New User

Grant the group membership from the list.

| Group | Description |
|---|---|
| Administrators | System Administrators |
| Users | Users Group |
| Test_engineers | User Manager Testing Group |

8. Grant the membership of the group to the user from the displayed list of groups.

9. Click on FINISH to create the user. The user profile is displayed in the list displayed in the User Manager window.



Use the list below to manage PeriView users.

| User | Full Name | Description |
|---|---|---|
| Administrator | System Administrator | PeriView System Administ... |
| peri | Standard User | PeriView Standard User |
| user1 | Test User | Testing User Manager |

**Password for**

To change the password, click Change Password.

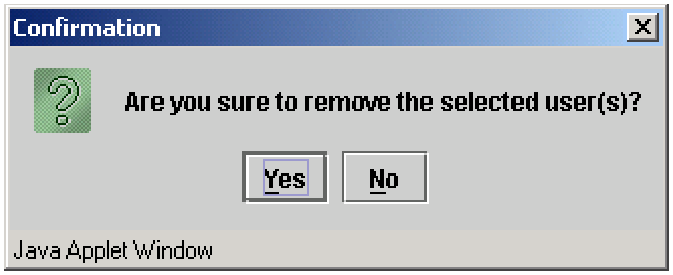
**Global Properties**

Configure the properties that apply to every user.

## Remove a User

To remove a user, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. In the `User Manager` window, select the user(s) that you wish to remove and choose REMOVE.



Are you sure to remove the selected user(s)?

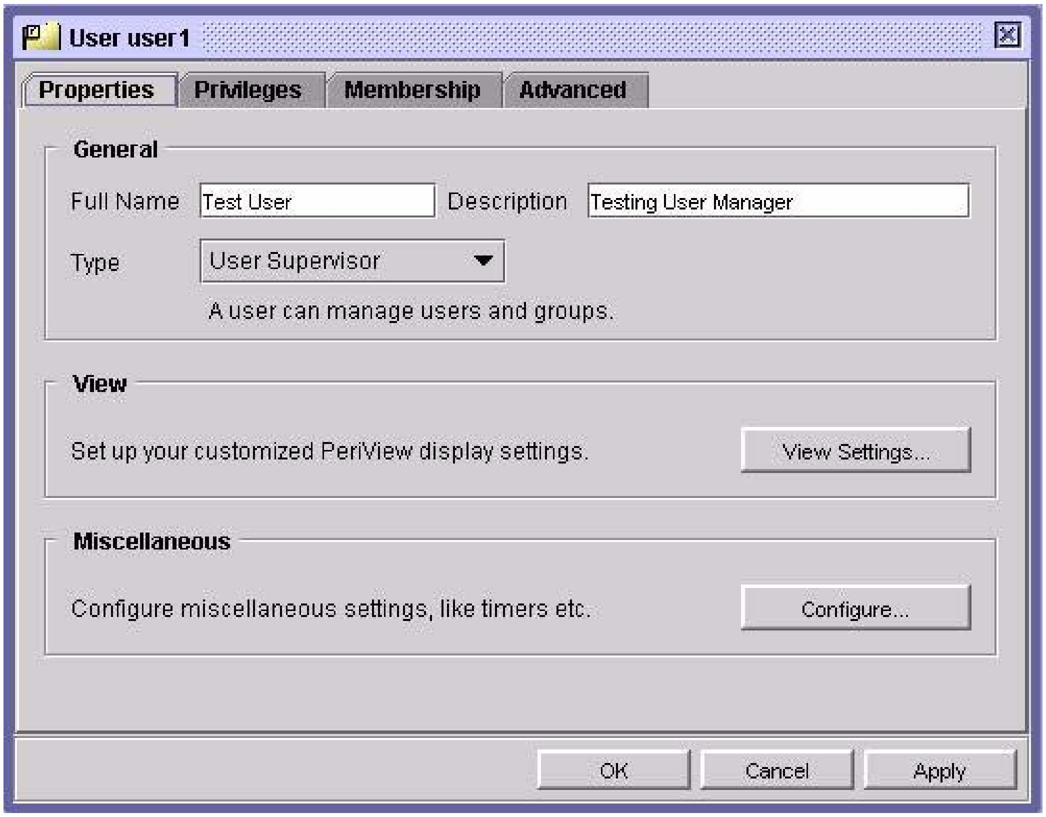
3. Click YES to delete the selected user profile or click NO to close the window without deleting the user profile.

When a user is removed from the list, all the properties and privileges associated with the user are also removed. The user is also removed from any groups it has membership of. The user "*Administrator*" cannot be removed from the list of users.

## Setting User Properties

To set the properties for a selected user, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Choose a user from the list displayed in the User tab and click on the `Properties` button. The screen appears with four tabs:
   - `Properties`—Allows to set the user properties
   - `Privileges`—Allows to set the user privileges
   - `Membership`—Provides information on the membership of the user to different groups
   - `Advanced`—Provides information on advanced properties of the user.



User user1

General

Full Name: Test User

Description: Testing User Manager

Type: User Supervisor

A user can manage users and groups.

View

Set up your customized PeriView display settings.

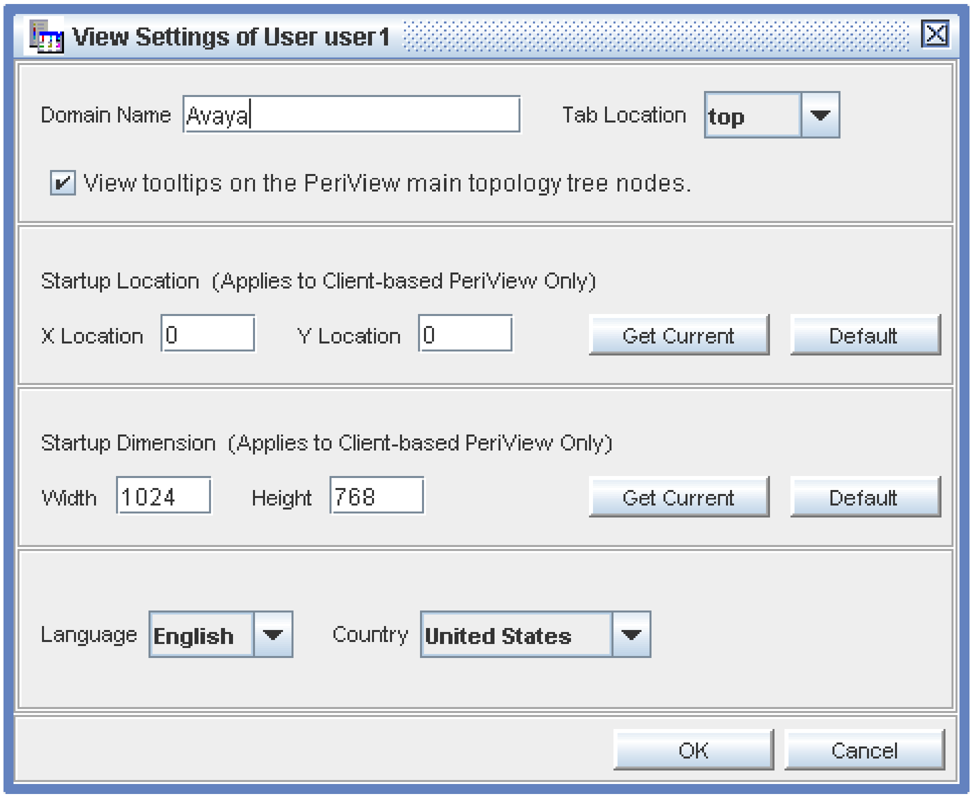
Miscellaneous

Configure miscellaneous settings, like timers etc.

By default, the Properties tab is displayed.

3. Modify the parameters as required in the `General` section.
   - Full Name—Displays the full name of the selected user.
   - Description—Displays the details for the selected user.
   - Type—Displays the type of the user.

4. To customize the PeriView display settings for the selected user, click on the VIEW SETTINGS button.



View Settings of User user1

Domain Name: Avaya

Tab Location: top

☑ View tooltips on the PeriView main topology tree nodes.

Startup Location (Applies to Client-based PeriView Only)

X Location: 0 Y Location: 0

Startup Dimension (Applies to Client-based PeriView Only)

Width: 1024 Height: 768

Language: English Country: United States

5. Modify the parameters as required. Click OK to save the changes in the View Settings. This saves the changes locally. To permanently save the changes made, click the OK button in the parent screen.

   - Domain Name—Displays the startup domain located in the navigation pane of the PeriView window. Checking the VIEW TOOLTIPS check box ensures that the tooltips are displayed on the PeriView main topology nodes.
   - Tab Location—Displays the location of the tab on the PeriView desktop.
   - Startup Location—Displays the location PeriView will open on the monitor screen. (Client-based only)

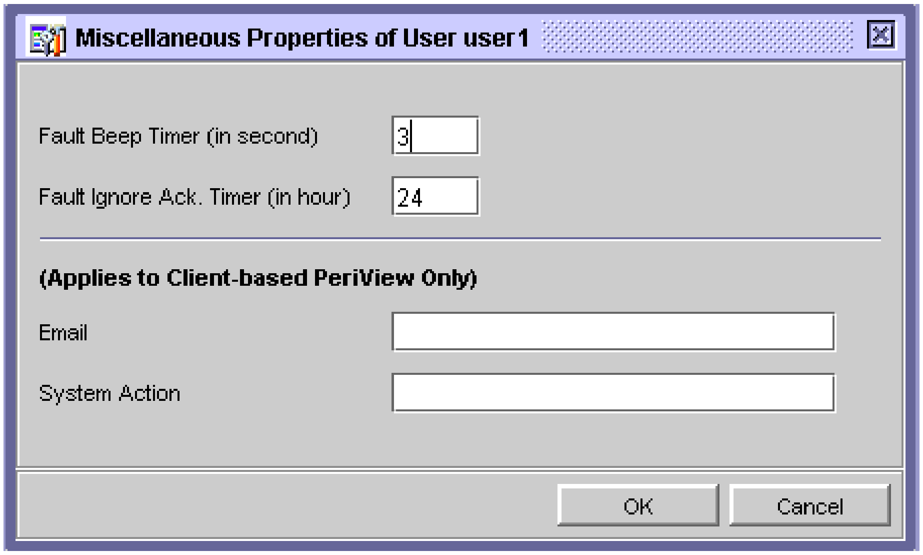
     Choosing GET CURRENT will set the location to where the PeriView window currently sits. The default location is X 0, Y 0.
   - Startup Dimension—Displays the size of the PeriView window upon startup. (Client-based only)

     Choosing GET CURRENT will set the size to whatever the PeriView window currently is. The default size is 1024 x 768.
   - Language—Choose the language which PeriView will use to display. Choose from English, French and Spanish.
   - Country—Choose the country from the list. This determines the country

where the selected language is spoken. The countries in the list change dynamically as different languages are chosen.

English displays countries United States and United Kingdom.
French displays countries France and Canada.
Spanish displays countries Spain, Mexico and Puerto Rico.

6. To configure miscellaneous settings for the selected user, click on the CONFIGURE... button. The `Miscellaneous Properties of User` screen appears.



Miscellaneous Properties of User user1

Fault Beep Timer (in second) 3

Fault Ignore Ack. Timer (in hour) 24

(Applies to Client-based PeriView Only)

Email

System Action

7. Modify the parameters as required. Click OK to save the changes in the `Miscellaneous Properties of User` screen. This saves the changes locally. To permanently save the changes made, click the OK button in the parent screen.

   - Fault Beep Timer (in second)—Displays the time interval (in seconds) between two beeping of `FAULT_IMMED_ACK` faults.

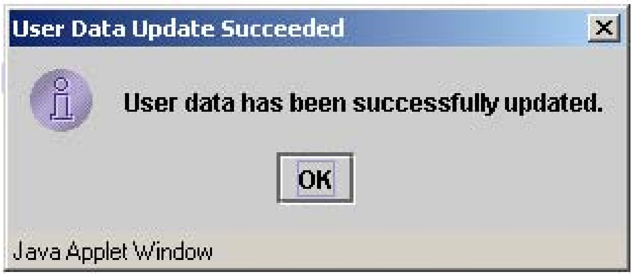
     For example, if this setting is 5 seconds and a fault of occurs, the user will hear a beep every 5 seconds until the fault is acknowledged.

   - Fault Ignore Ack. Timer (in hour)—Displays the time interval (in hours) during which a user has to acknowledge a `FAULT_IMMED_ACK` fault.

     For example, the `Ignore Ack Timer` is set to 1 hour and a fault occurs at 1pm, and then a second fault occurs at 2 pm. If at 2:30 pm, the user acknowledges the faults, only the second fault is displayed. This is because the first fault occurred earlier than 1 hour before the user acknowledged the fault. However, every fault, whether acknowledged or not, is recorded in the log file.

- Email—Displays the email address which PeriView will use for `FAULT_USER_ACTION`. Once a `FAULT_USER_ACTION` occurs, PeriView will send an email to the address specified here. (Client-based only)
- System Action—Displays the setting of faults for `FAULT_SYS_ACTION`. Generally, it may be a system command. When a fault of `FAULT_SYS_ACTION` occurs, PeriView executes the specified system command. However, the user can set only one system action.

**8.** To save the changes made to the settings of the selected user, click on APPLY. An informative pop-up window appears informing you that the user data has been successfully updated.



User Data Update Succeeded

User data has been successfully updated.

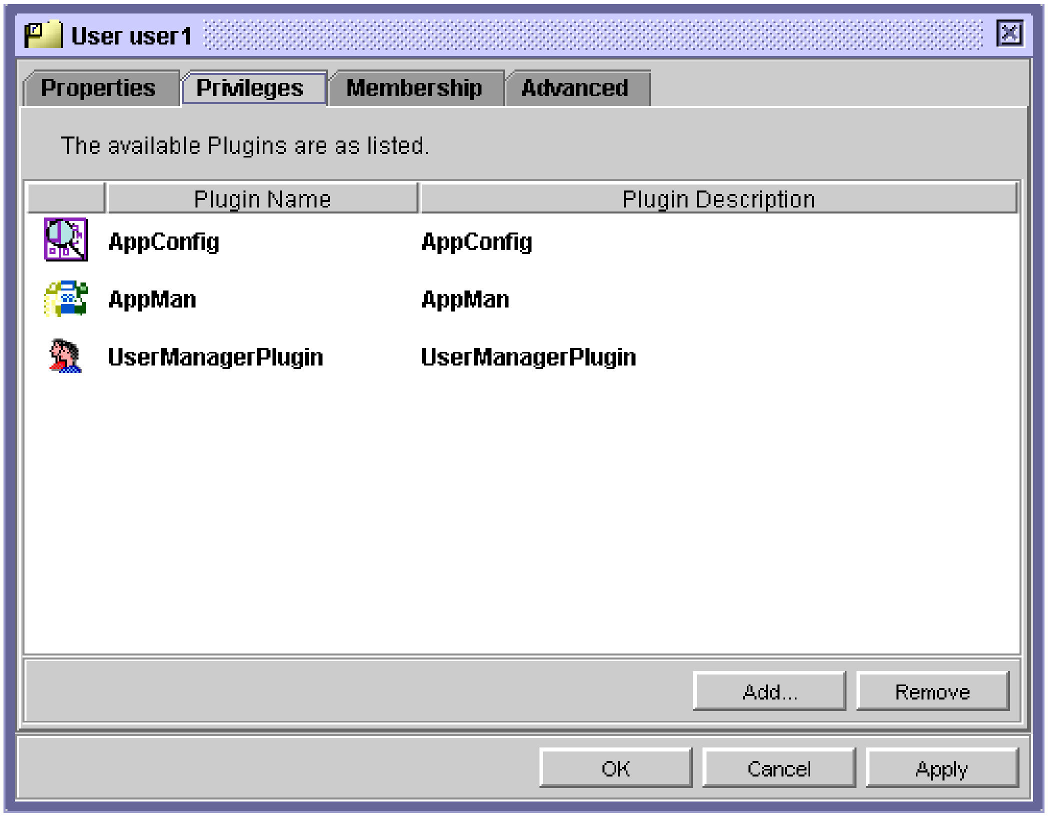
**9.** Click OK to save the changes made to the settings for the selected user.

## Setting User Privileges

To set the privileges for a selected user, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Choose a user from the list displayed in the User tab and click on the `Properties` button.
3. Click on the `Privileges` tab to view the plugins available to the selected user.

   The `Privileges` tab displays the plugins available to the user along with the description for the plugin.

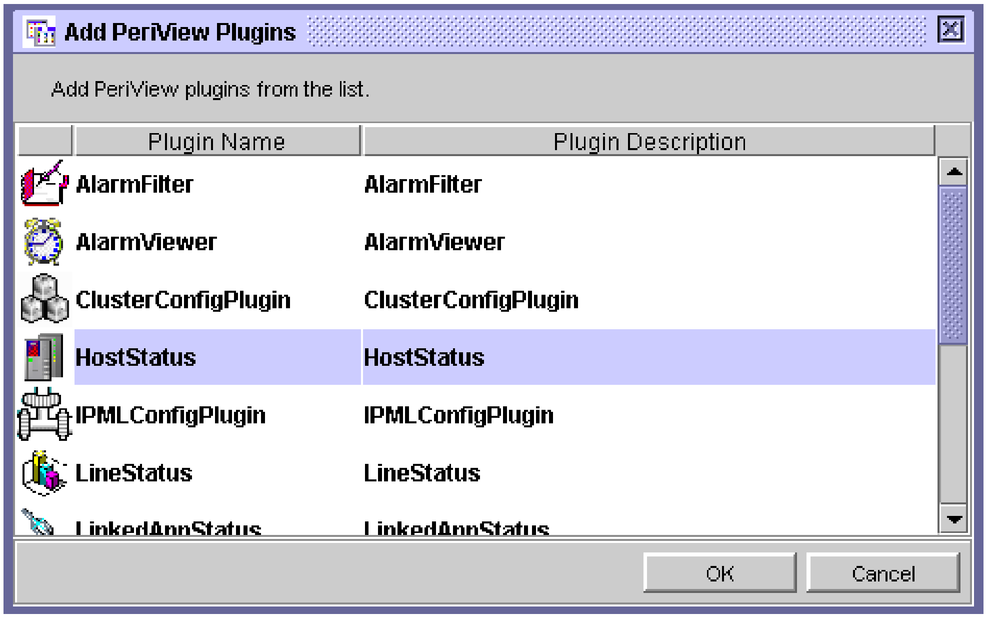


The available Plugins are as listed.

| Plugin Name | Plugin Description |
|---|---|
| AppConfig | AppConfig |
| AppMan | AppMan |
| UserManagerPlugin | UserManagerPlugin |

A user without administrative rights can only view the privileges. The user will not be allowed to modify the privileges settings.

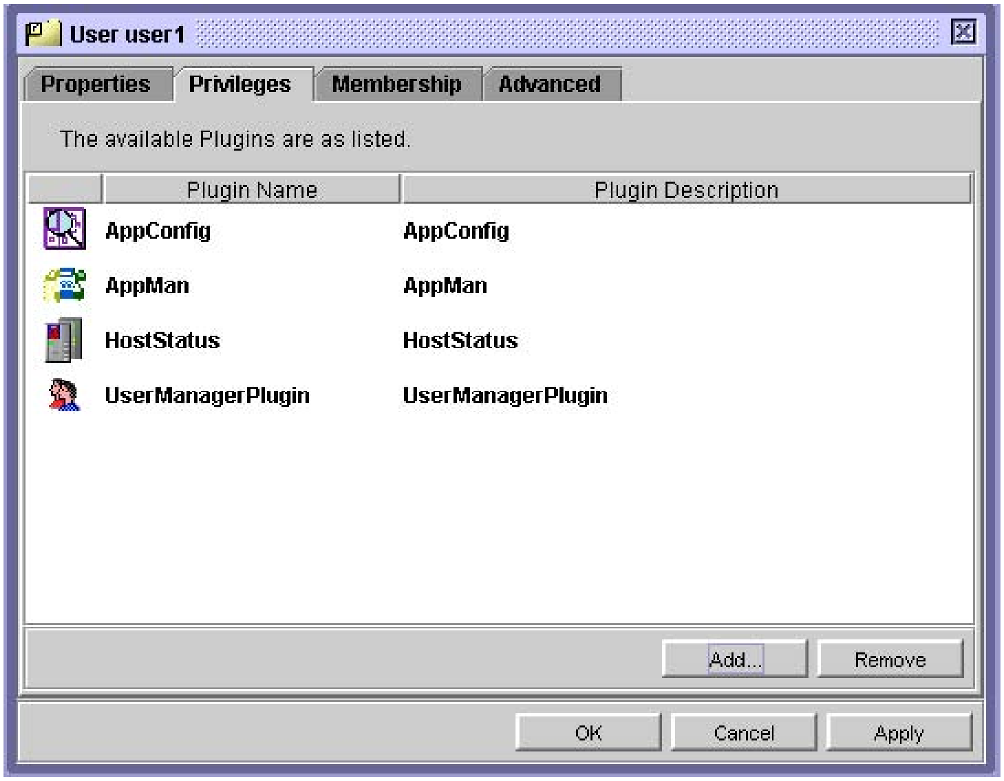
4. To add a plugin for the selected user, click on the ADD button.



Add PeriView plugins from the list.

| Plugin Name | Plugin Description |
|---|---|
| AlarmFilter | AlarmFilter |
| AlarmViewer | AlarmViewer |
| ClusterConfigPlugin | ClusterConfigPlugin |
| HostStatus | HostStatus |
| IPMLConfigPlugin | IPMLConfigPlugin |
| LineStatus | LineStatus |
| LinkedAppStatus | LinkedAppStatus |

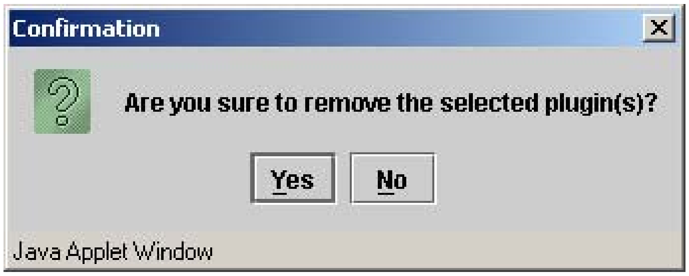
5. Choose the plugins that you wish to add for the selected user. Click OK. The plugins are now available to the user and are displayed in the `Privileges` tab.



The available Plugins are as listed.

| Plugin Name | Plugin Description |
|---|---|
| AppConfig | AppConfig |
| AppMan | AppMan |
| HostStatus | HostStatus |
| UserManagerPlugin | UserManagerPlugin |

6. To remove a plugin, select the plugin which you wish to remove for the selected user and click on the REMOVE button. A pop-up dialog appears asking you to confirm that you wish to remove the plugin for the selected user.



Confirmation

Are you sure to remove the selected plugin(s)?

7. Choose YES to remove the plugin temporarily or locally.

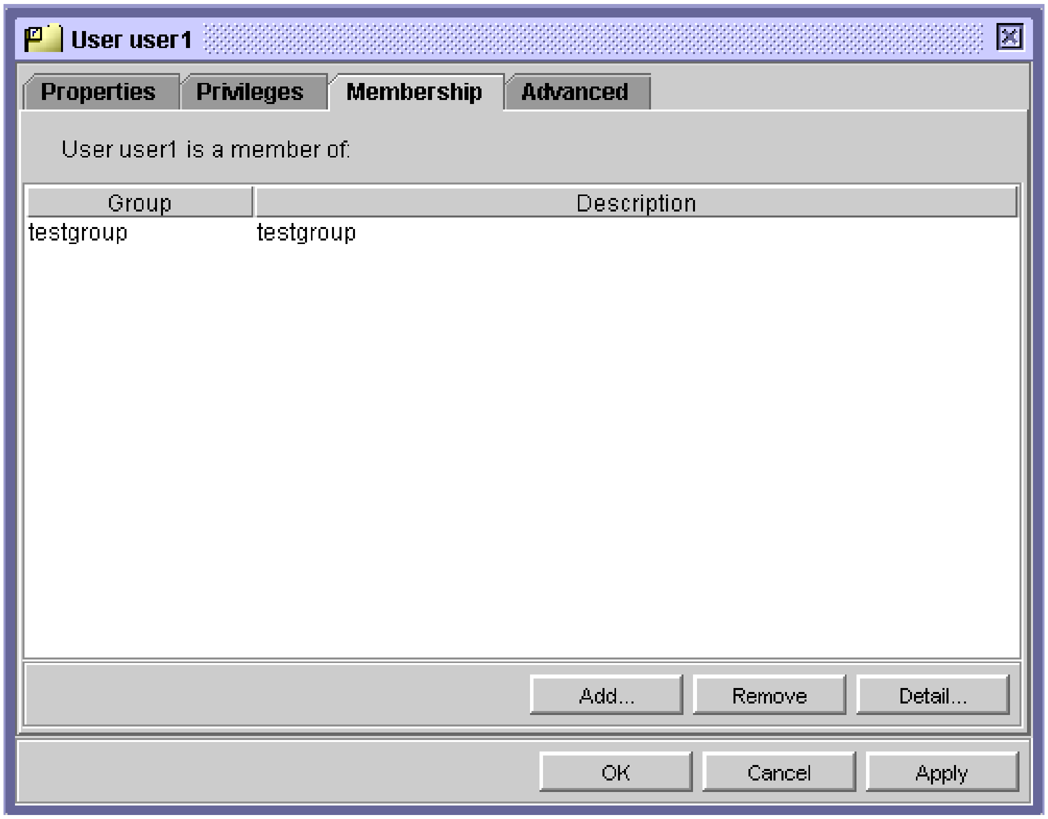
8. Click OK or APPLY to save the changes.

## Membership Management

To view/set the membership for a selected user, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Choose a user from the list displayed in the User tab and click on the `Properties` button.
3. Click on the `Membership` tab to view the groups available to the selected user.

   The `Membership` tab displays the groups that the user is associated with.

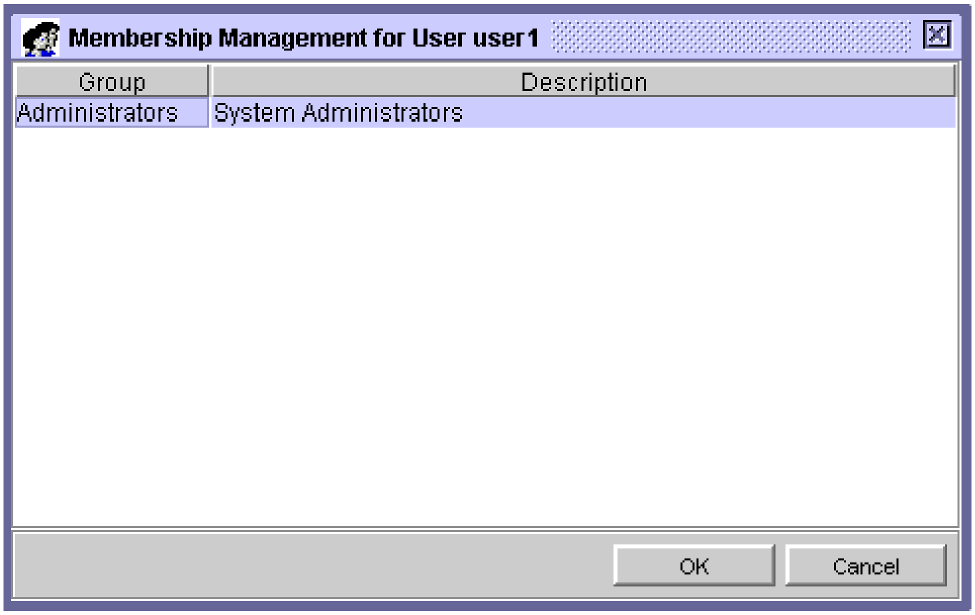


User user1 is a member of:

| Group | Description |
|---|---|
| testgroup | testgroup |

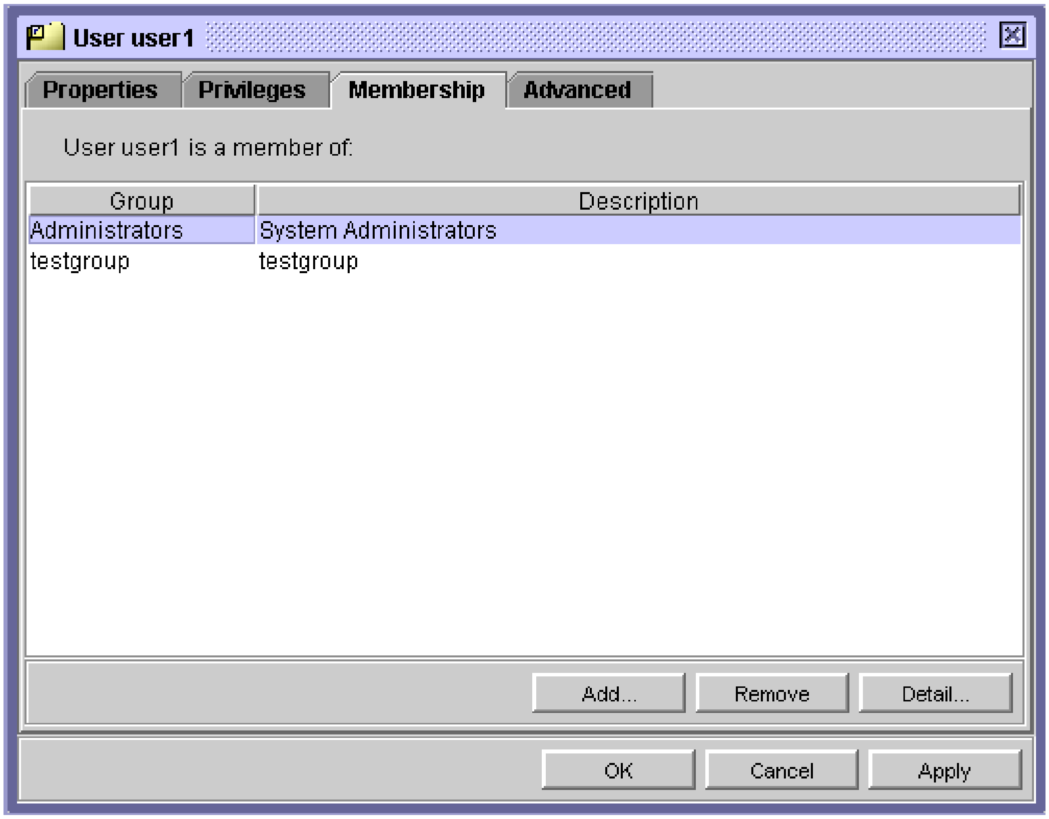
A user without administrative rights can only view the membership details. The user will not be allowed to modify the membership settings as the ADD and REMOVE buttons will be disabled.

4. To add the user as a member of an additional group, click on the ADD button. The Membership Management window appears.



| Group | Description |
|---|---|
| Administrators | System Administrators |

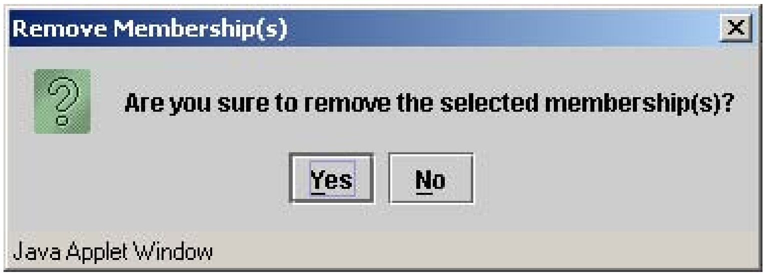
5. Choose the groups that you wish to add for the selected user. Click OK. The groups are now available to the user and are displayed in the `Membership` tab.



User user1 is a member of:

| Group | Description |
|---|---|
| Administrators | System Administrators |
| testgroup | testgroup |

6. To remove the membership of a group for the selected user, click on the REMOVE button. A pop-up dialog appears asking you to confirm that you wish to remove the group for the selected user.



Are you sure to remove the selected membership(s)?

7. Choose YES to remove the user's membership from the group locally.

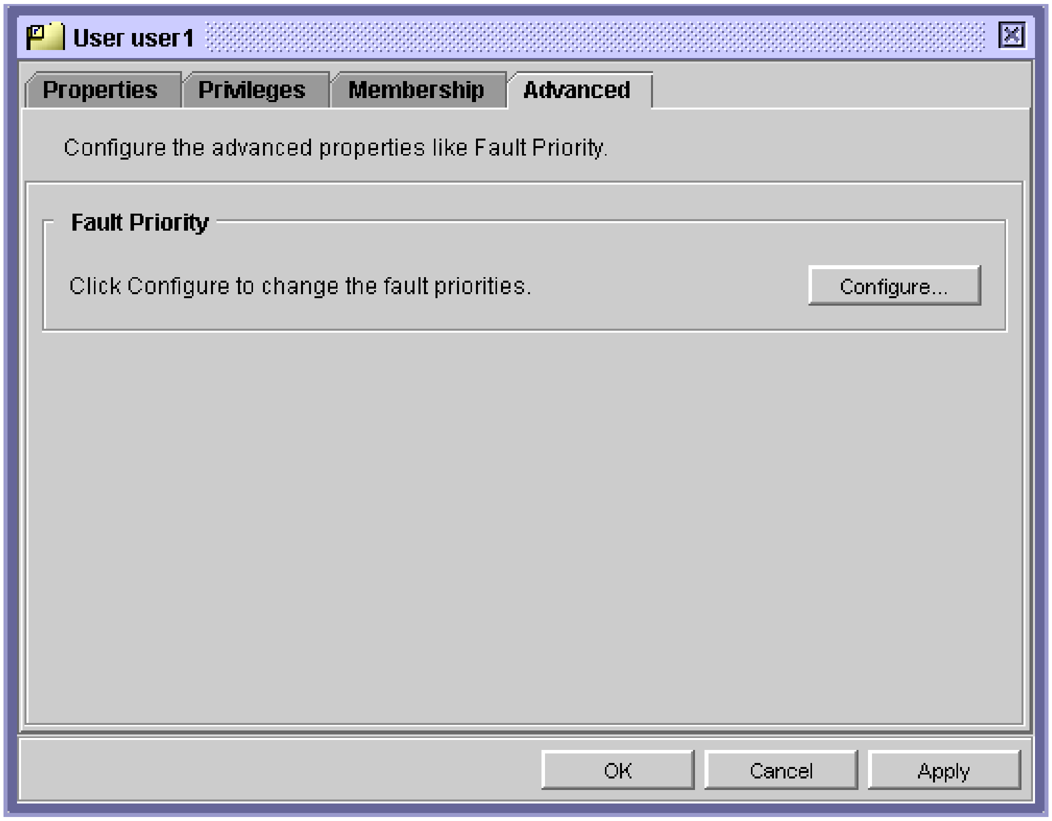
8. Click OK or APPLY button in the parent window to save the changes.

9. To get the details of user's group, click on the DETAILS button. For more information, refer Setting Group Properties section.

## User’s Advanced Properties

To set the advanced properties for a selected user, proceed as follows:

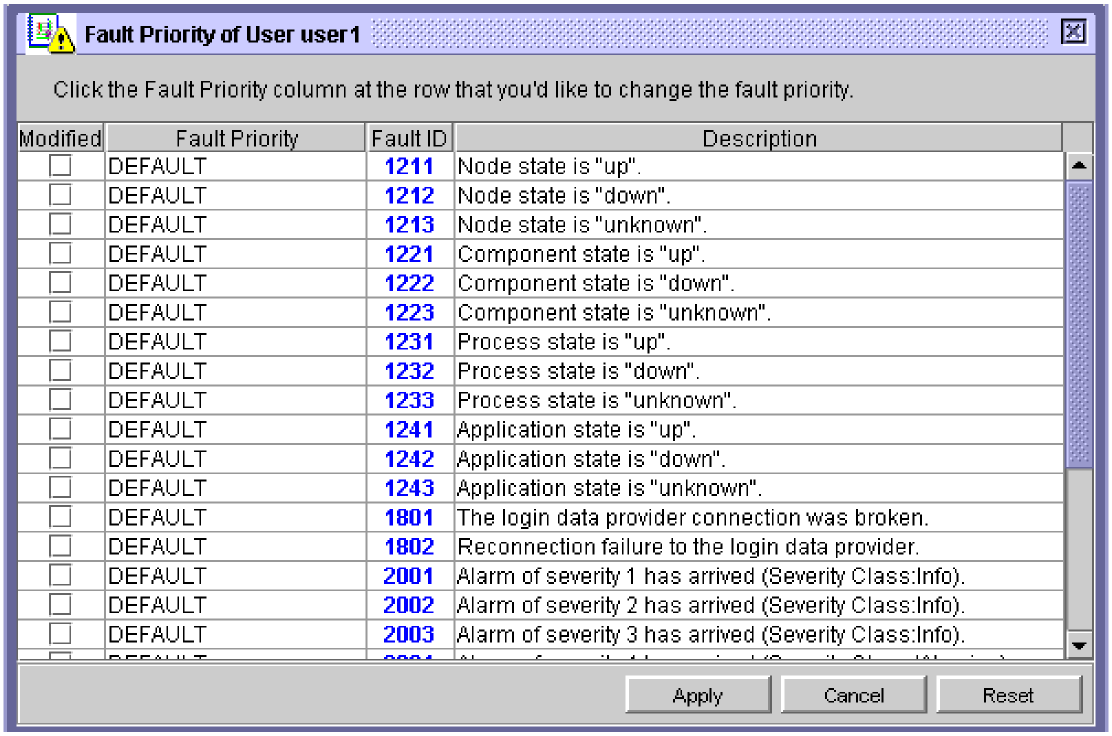
1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Choose a user from the list displayed in the User tab and click on the `Properties` button.
3. Click on the `Advanced` tab to configure the advanced properties like Fault Priority for the selected user.



Configure the advanced properties like Fault Priority.

Click Configure to change the fault priorities.

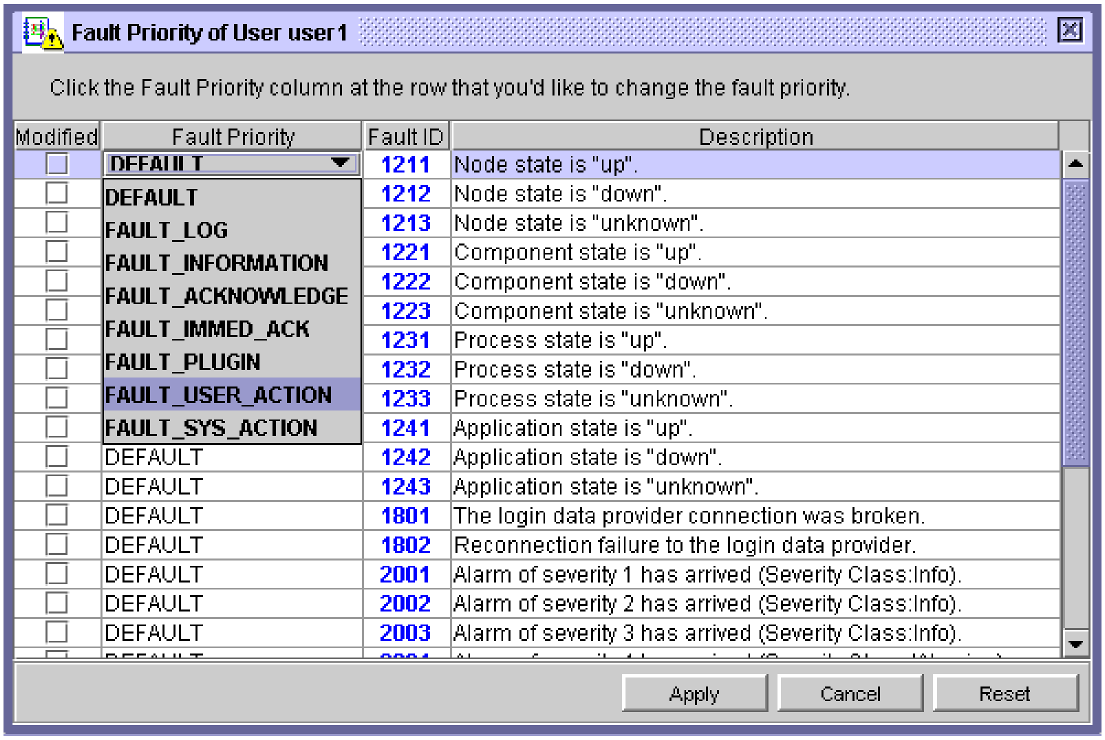
4. The. Fault Priority Modifier provides a Graphical User Interface (GUI) to change priorities of faults used by PeriView. PeriView handles exceptions as faults. Each fault has a priority when it is generated occurs. To configure the fault priorities for the selected user, click on the CONFIGURE... button.



Click the Fault Priority column at the row that you'd like to change the fault priority.

| Modified | Fault Priority | Fault ID | Description |
|---|---|---|---|
| □ | DEFAULT | 1211 | Node state is "up". |
| □ | DEFAULT | 1212 | Node state is "down". |
| □ | DEFAULT | 1213 | Node state is "unknown". |
| □ | DEFAULT | 1221 | Component state is "up". |
| □ | DEFAULT | 1222 | Component state is "down". |
| □ | DEFAULT | 1223 | Component state is "unknown". |
| □ | DEFAULT | 1231 | Process state is "up". |
| □ | DEFAULT | 1232 | Process state is "down". |
| □ | DEFAULT | 1233 | Process state is "unknown". |
| □ | DEFAULT | 1241 | Application state is "up". |
| □ | DEFAULT | 1242 | Application state is "down". |
| □ | DEFAULT | 1243 | Application state is "unknown". |
| □ | DEFAULT | 1801 | The login data provider connection was broken. |
| □ | DEFAULT | 1802 | Reconnection failure to the login data provider. |
| □ | DEFAULT | 2001 | Alarm of severity 1 has arrived (Severity Class:Info). |
| □ | DEFAULT | 2002 | Alarm of severity 2 has arrived (Severity Class:Info). |
| □ | DEFAULT | 2003 | Alarm of severity 3 has arrived (Severity Class:Info). |

5. Select the fault priority for the corresponding fault id as shown below. Fault ids are unique, predefined in PeriView and for PeriView internal use. Faults whose fault priorities are modifiable have appropriate descriptions.



Click the Fault Priority column at the row that you'd like to change the fault priority.

| Modified | Fault Priority | Fault ID | Description |
|---|---|---|---|
| □ | DEFAULT ▼ | 1211 | Node state is "up". |
| □ |  | 1212 | Node state is "down". |
| □ |  | 1213 | Node state is "unknown". |
| □ |  | 1221 | Component state is "up". |
| □ |  | 1222 | Component state is "down". |
| □ |  | 1223 | Component state is "unknown". |
| □ |  | 1231 | Process state is "up". |
| □ |  | 1232 | Process state is "down". |
| □ |  | 1233 | Process state is "unknown". |
| □ |  | 1241 | Application state is "up". |
| □ | DEFAULT | 1242 | Application state is "down". |
| □ | DEFAULT | 1243 | Application state is "unknown". |
| □ | DEFAULT | 1801 | The login data provider connection was broken. |
| □ | DEFAULT | 1802 | Reconnection failure to the login data provider. |
| □ | DEFAULT | 2001 | Alarm of severity 1 has arrived (Severity Class:Info). |
| □ | DEFAULT | 2002 | Alarm of severity 2 has arrived (Severity Class:Info). |
| □ | DEFAULT | 2003 | Alarm of severity 3 has arrived (Severity Class:Info). |

### Detailed Description of the Fault Priority of User screen

- FAULT_LOG—To log a fault to a log file if applicable, including the time of logging and fault info.
- FAULT_INFORMATION—Puts the fault message to the left footer of the Main frame.
- FAULT_ACKNOWLEDGE—Pops up a dialog with fault message. The user must acknowledge this to proceed.
- FAULT_IMMED_ACK—An icon will appear on the left footer.
- FAULT_PLUGIN—No specific action. The Plugin associated to the fault (if any) should handle it.
- FAULT_USER_ACTION—Executes a user-predefined action. Currently, the action is to send an email to a specific receiver. The related setting is in Account Properties (Email) and Global Configuration (SMTP Server and Sender's Email).
- FAULT_SYS_ACTION—Executes a user-defined system command or script if applicable. User can change this in Account Properties (System Action).

6. Click on APPLY to save the changes locally. To permanently save the changes made, click the OK button in the parent screen.
7. To reset the fault priority for the selected fault id, click on the RESET button.
8. To save the changes made in the fault priority, click APPLY in the User window as displayed in Step 3.

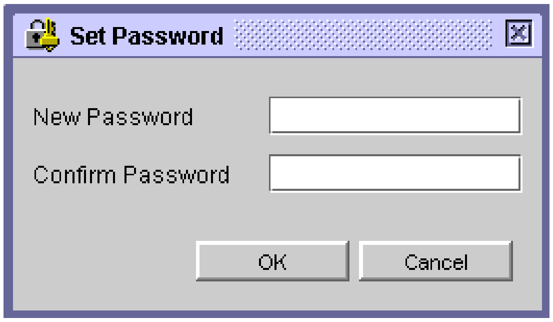
☞ For Client-based PeriView, handling of all seven fault priorities are supported with appropriate settings (like email, smtp server, and so on).

☞ For Browser-based PeriView, PeriView does not support the highest two (FAULT_USER_ACTION and FAULT_SYS_ACTION) at this time. Faults of the two priorities will be handled as lower fault priorities here. All faults are logged to a log file if applicable. In Browser-based PeriView, the log is in the Java Console when available.

## Setting Password

To set the password for a selected user, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Choose a user from the list displayed in the User tab and click on the `Properties` button.
3. Click on the SET PASSWORD button to set the password for the selected user.



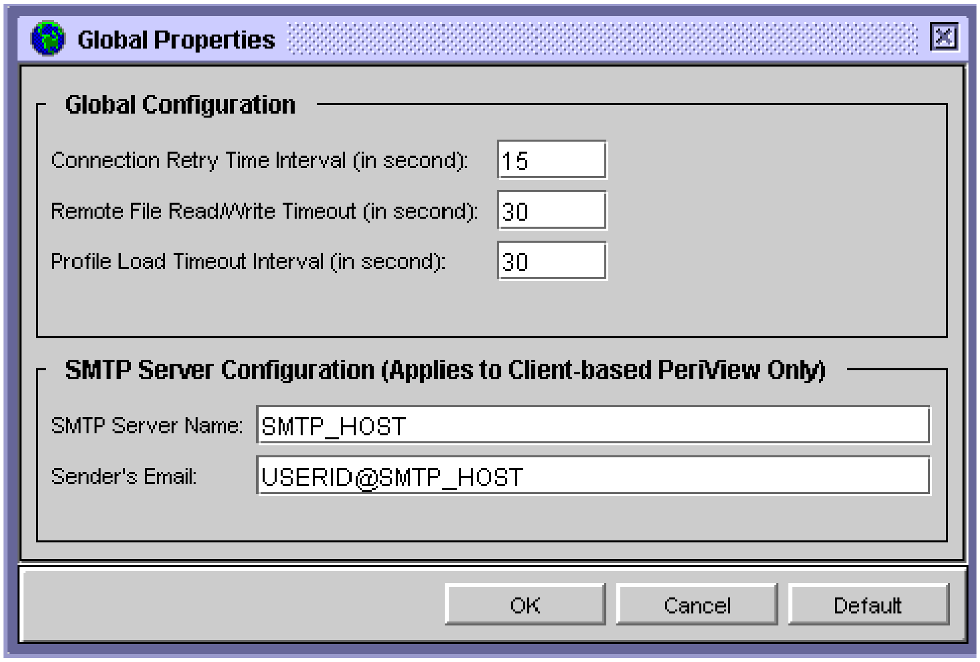
4. Specify the new password for the selected user.
5. Click on OK button to save the new password.

## Configuring Global Properties

The Global Configuration tool allows to configure the common properties for all the users. These properties apply to all the users.

To set the global properties for all the users, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Click on the CONFIGURE... button to set the global configurations for all the users.



Global Properties

Global Configuration

Connection Retry Time Interval (in second): 15

Remote File Read/Write Timeout (in second): 30

Profile Load Timeout Interval (in second): 30

SMTP Server Configuration (Applies to Client-based PeriView Only)

SMTP Server Name: SMTP_HOST

Sender's Email: USERID@SMTP_HOST

3. Configure the parameters displayed in the Global Properties screen.

### Detailed Description of the Global Properties screen

- Connection Retry Time Interval—When disconnection occurs between PeriView and the MPS Manager Data Provider (MMDP), PeriView attempts to establish the connection again. This setting (in seconds) determines the time interval between the attempts made for connection. PeriView continues to attempt to connect until it is successful. The default setting for this interval is 10 seconds.
- Remote File Read/Write Timeout—For file operations, PeriView by default starts a timer after a file-related request is sent. PeriView waits for a time interval specified in this setting (in seconds). If there is no response for the request sent, PeriView discards the request and informs the user. The default setting for this interval is 30 seconds.
- Profile Load Timeout Interval—PeriView provides support for profiles. Incase of a connection related problem, a profile may not be loaded as soon as the user selects it. This time interval specifies the time for PeriView to attempt to reload a profile. If the specified time expires and

the selected profile has still not loaded successfully, PeriView stops loading the profile and informs the user. The default setting for this interval is 30 seconds.

- SMTP Server Name—This is used for PeriView fault handling of FAULT_USER_ACTION, which sends email of fault info to the user-specified email address. This setting must be valid for FAULT_USER_ACTION fault handling to be in effect.

For Client-based PeriView only.

- Sender Email—This is used for PeriView fault handling of FAULT_USER_ACTION, which sends email of fault info to this user-specified email address. This setting must be valid for FAULT_USER_ACTION fault handling to be in effect.

4. Click Ok to save the changes.

## User Manager—Group Tab

The Group tab allows the PeriView administrator to:

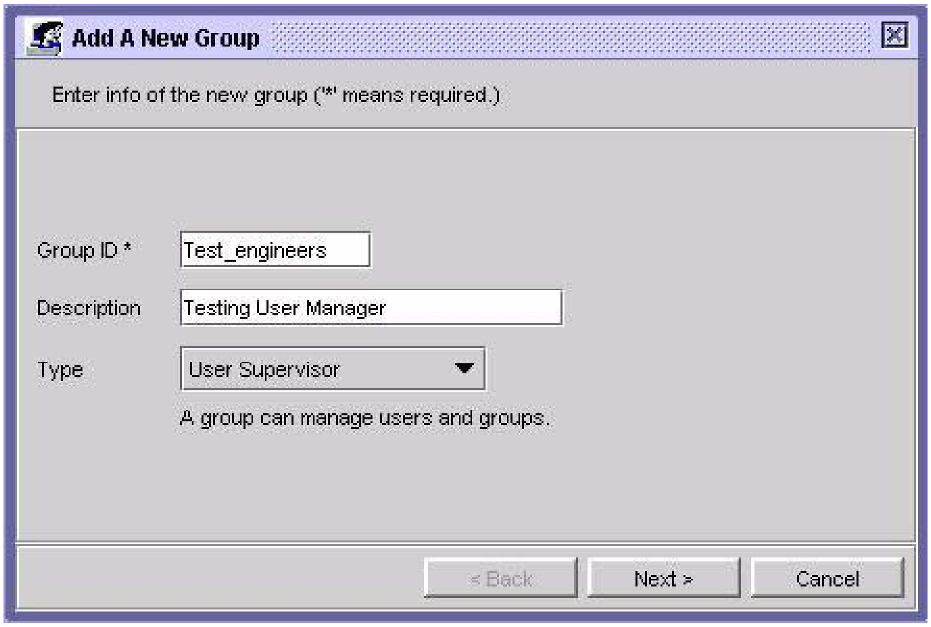
- Adding a new Group
- Remove a Group
- Setting Group Properties
- Setting Group Privileges
- Member Management
- Group's Advanced Properties

### Adding a new Group

PeriView provides a GUI to add/remove a new group of users/groups, set/edit properties/privileges for the group of users.

To add a new group, proceed as follows:

1. Launch the User Manager window. Refer Launching the User Manager Plugin section for more details.
2. Click on the ADD button, to create a new group.



Add A New Group

Enter info of the new group ('*' means required.)

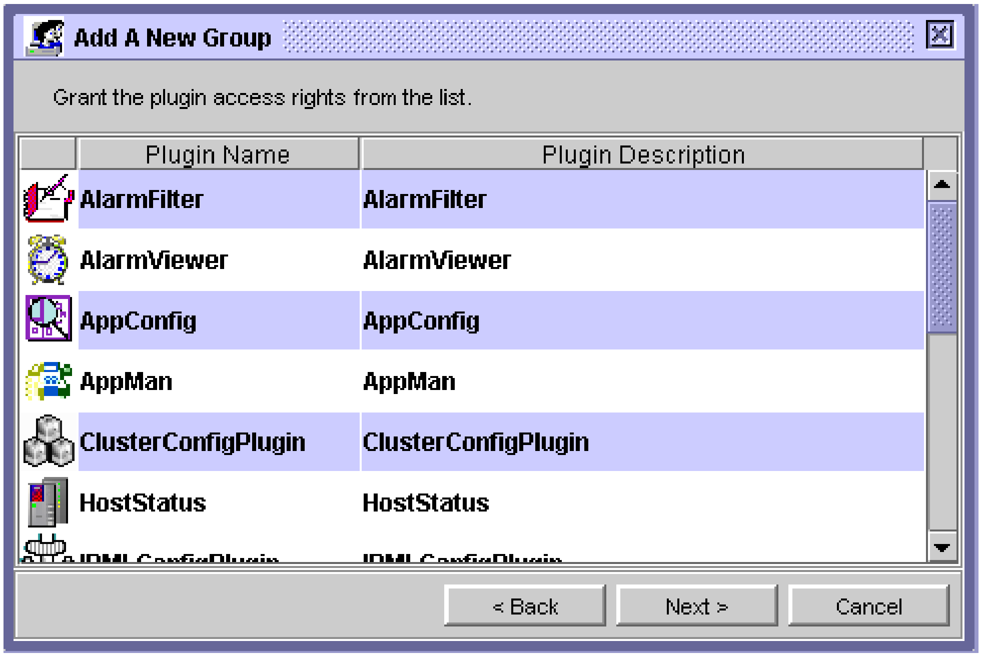
Group ID * Test_engineers

Description Testing User Manager

Type User Supervisor

A group can manage users and groups.

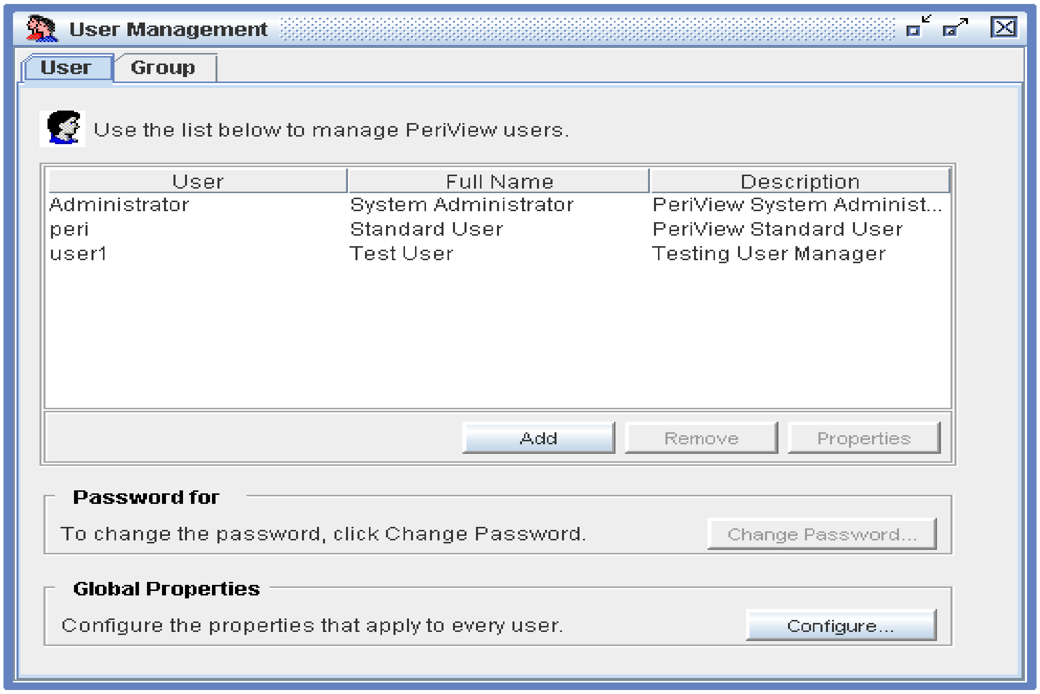
3. Enter a group id for the new group in the `Group ID` text box.
4. Enter the Description for the new group that is being created and click on the NEXT button to grant the plugin access rights to the new group.
5. Select the type of group. The group can be of type, *User Supervisor* and *Normal*.



Grant the plugin access rights from the list.

| Plugin Name | Plugin Description |
|---|---|
| AlarmFilter | AlarmFilter |
| AlarmViewer | AlarmViewer |
| AppConfig | AppConfig |
| AppMan | AppMan |
| ClusterConfigPlugin | ClusterConfigPlugin |
| HostStatus | HostStatus |
| IPMI ConfigPlugin | IPMI ConfigPlugin |

6. Select the plugins (from the list displayed) for which you wish to grant the access rights. Click on NEXT to grant the user members from the list displayed.



Use the list below to manage PeriView users.

| User | Full Name | Description |
|---|---|---|
| Administrator | System Administrator | PeriView System Administ... |
| peri | Standard User | PeriView Standard User |
| user1 | Test User | Testing User Manager |

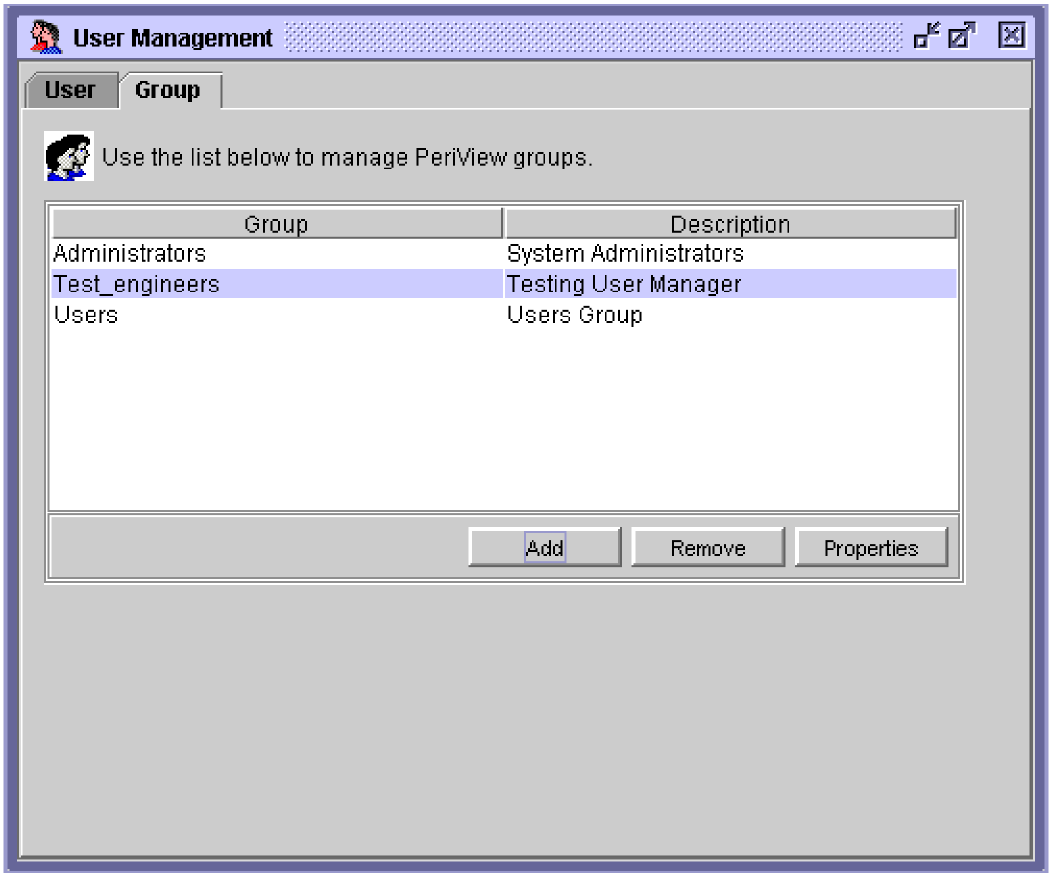
**Password for**

To change the password, click Change Password.

**Global Properties**

Configure the properties that apply to every user.

7. Choose the group members from the list. Click on FINISH to create the new group. The new group is displayed in the list on the User Manager screen.



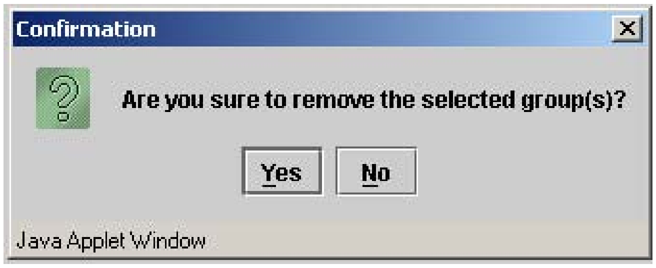
Use the list below to manage PeriView groups.

| Group | Description |
|---|---|
| Administrators | System Administrators |
| Test_engineers | Testing User Manager |
| Users | Users Group |

## Remove a Group

To remove a group, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details.
2. Choose the Group tab in the `User Manager` window, select the group(s) that you wish to remove and choose REMOVE.



Are you sure to remove the selected group(s)?

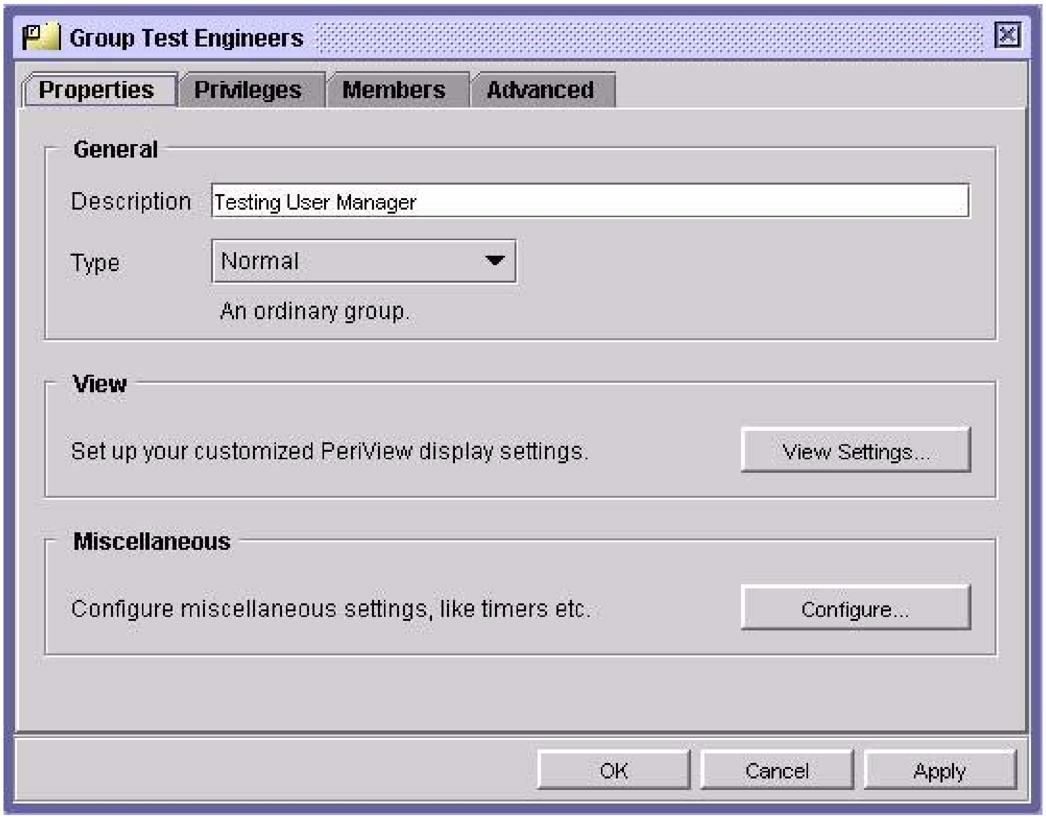
3. Click YES to delete the selected group or click NO to close the window without deleting the group.

When a group is removed from the list, all the properties and privileges associated with the group are also removed.

## Setting Group Properties

To set the properties for a selected group, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details. Choose the Group tab.
2. Choose a group from the list displayed in the Group tab and click on the `Properties` button. The screen appears with four tabs:
   - `Properties`—Allows to set the group properties
   - `Privileges`—Allows to set the group privileges
   - `Members`—Provides information on the members of the group
   - `Advanced`—Allows to configure the advanced properties of the group



Description: Testing User Manager

Type: Normal

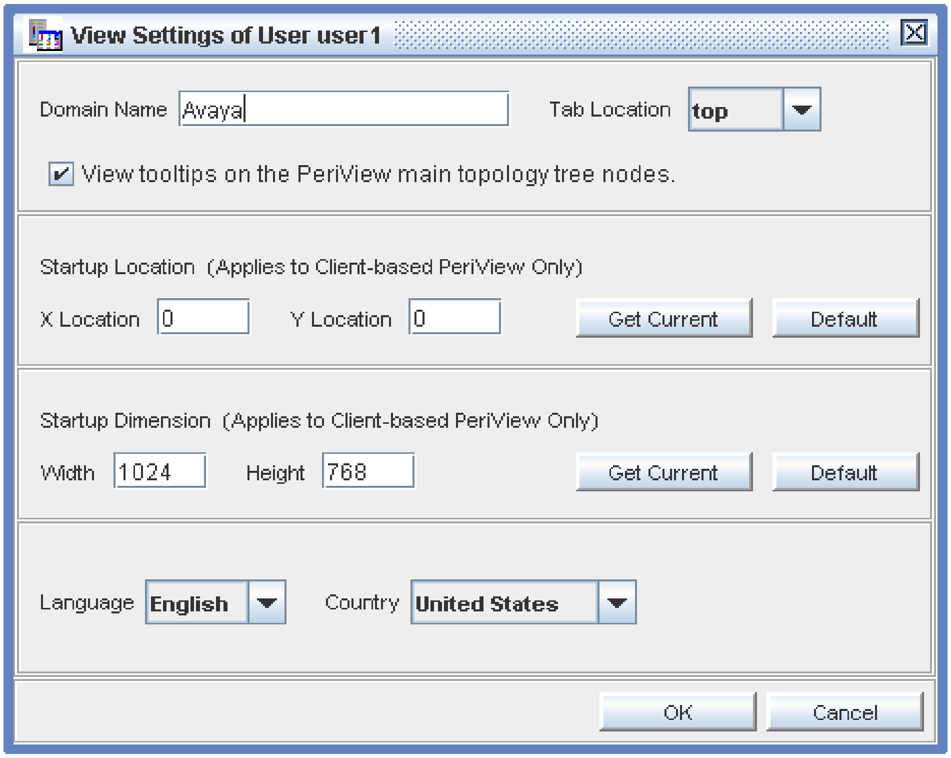
An ordinary group.

Set up your customized PeriView display settings.

Configure miscellaneous settings, like timers etc.

3. Modify the parameters as required in the `General` section.
   - Description—Displays the details of the selected group.
   - Type—Displays the type of the user.

4. To customize the PeriView display settings for the selected user, click on the VIEW SETTINGS button.



View Settings of User user1

Domain Name Avaya

Tab Location top

☑ View tooltips on the PeriView main topology tree nodes.

Startup Location (Applies to Client-based PeriView Only)

X Location 0

Y Location 0

Startup Dimension (Applies to Client-based PeriView Only)

Width 1024

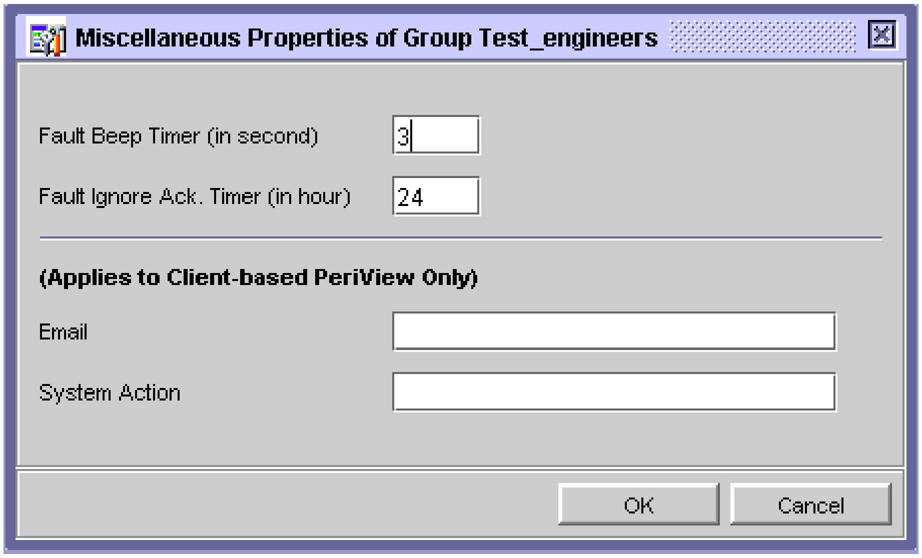
Height 768

Language English

Country United States

5. Modify the parameters as required. Click OK to save the changes in the `View Settings of Group Users` screen. This saves the changes locally. To permanently save the changes made, click the OK button in the parent screen.

6. To configure miscellaneous settings for the selected group, click on the CONFIGURE... button. The `Miscellaneous Properties of User` screen appears.



Miscellaneous Properties of Group Test_engineers

Fault Beep Timer (in second): 3

Fault Ignore Ack. Timer (in hour): 24

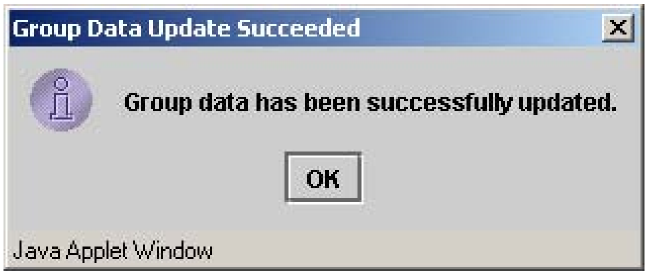
(Applies to Client-based PeriView Only)

Email:

System Action:

7. Modify the parameters as required. Click OK to save the changes in the `Miscellaneous Properties of Group` screen. This saves the changes locally. To permanently save the changes made, click the OK button.

8. To save the changes made to the settings of the selected group, click on APPLY. An informative pop-up window appears informing you that the group data has been successfully updated.



Group Data Update Succeeded

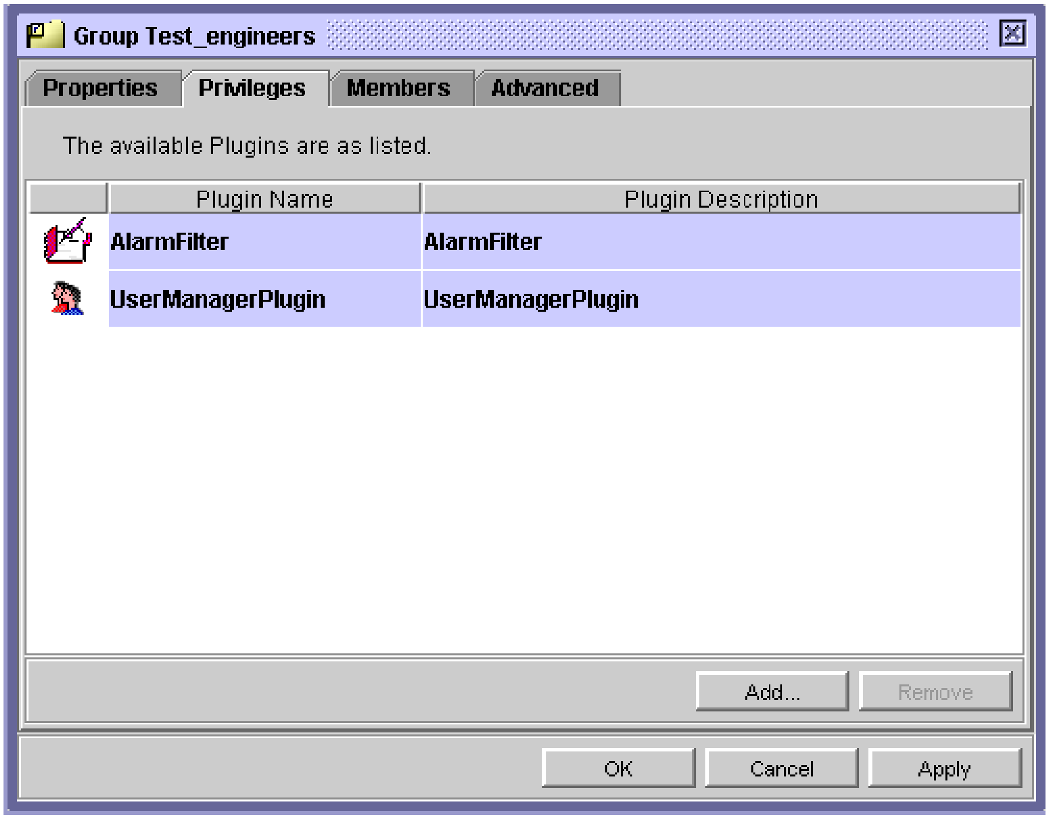
Group data has been successfully updated.

9. Click OK to save the changes made to the settings for the selected group.

## Setting Group Privileges

To set the privileges for a selected user, proceed as follows:

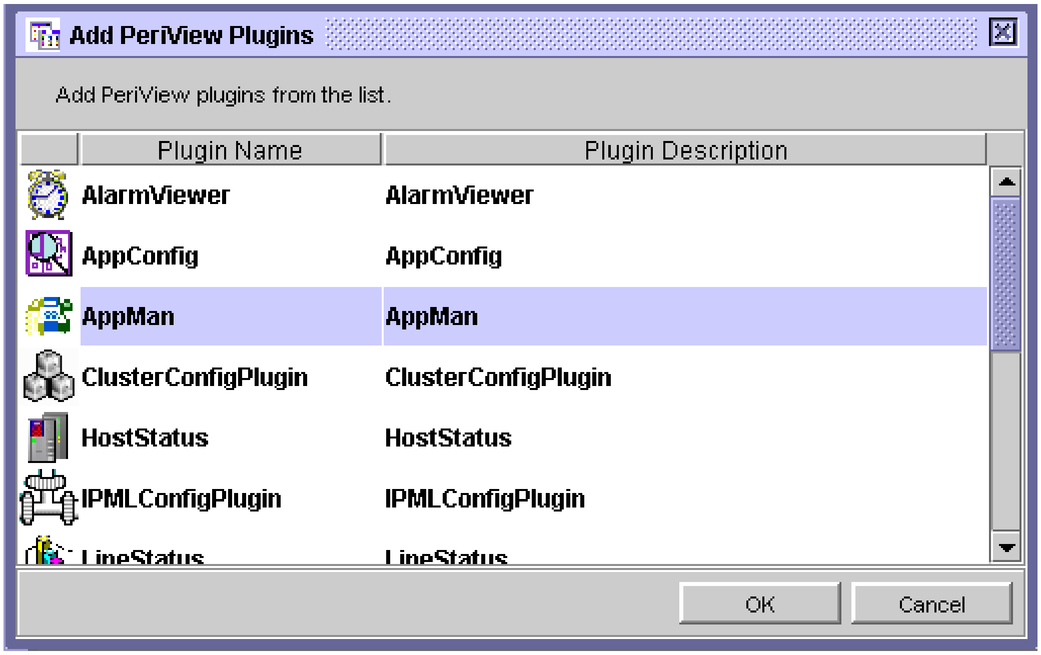
1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details. Choose the `Group` tab.
2. Choose a group from the list displayed in the Group tab and click on the `Properties` button.
3. Click on the `Privileges` tab to view the plugins available to the selected group. The `Privileges` tab displays the plugins available to the group along with the description for the plugin.



The available Plugins are as listed.

| | Plugin Name | Plugin Description |
|---|---|---|
| | AlarmFilter | AlarmFilter |
| | UserManagerPlugin | UserManagerPlugin |

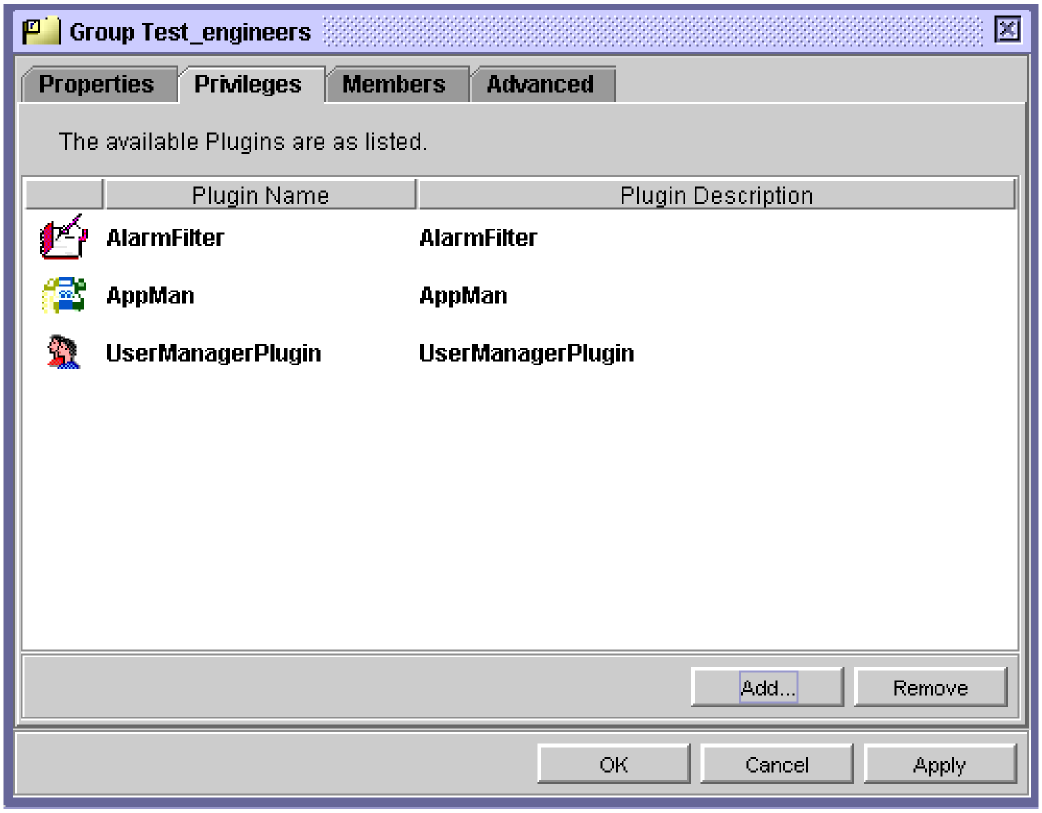
**4.** To add a plugin for the selected group, click on the ADD button.



Add PeriView plugins from the list.

| | Plugin Name | Plugin Description |
|---|---|---|
| | AlarmViewer | AlarmViewer |
| | AppConfig | AppConfig |
| | AppMan | AppMan |
| | ClusterConfigPlugin | ClusterConfigPlugin |
| | HostStatus | HostStatus |
| | IPMLConfigPlugin | IPMLConfigPlugin |
| | LineStatus | LineStatus |

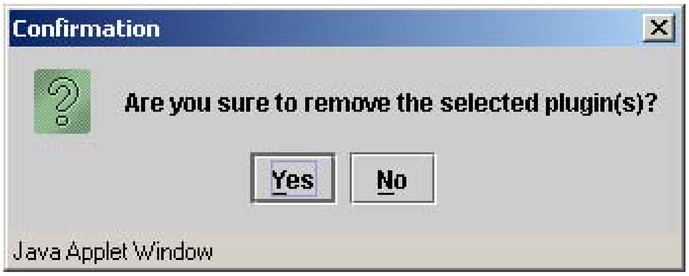
**5.** Choose the plugins that you wish to add for the selected group. Click OK. The plugins are now available to the group and are displayed in the `Privileges` tab.



The available Plugins are as listed.

| | Plugin Name | Plugin Description |
|---|---|---|
| | AlarmFilter | AlarmFilter |
| | AppMan | AppMan |
| | UserManagerPlugin | UserManagerPlugin |

6. To remove a plugin, select the plugin which you wish to remove for the selected group and click on the REMOVE button. A pop-up dialog appears asking you to confirm that you wish to remove the plugin for the selected group.



Are you sure to remove the selected plugin(s)?

7. Choose YES to remove the plugin temporarily or locally.

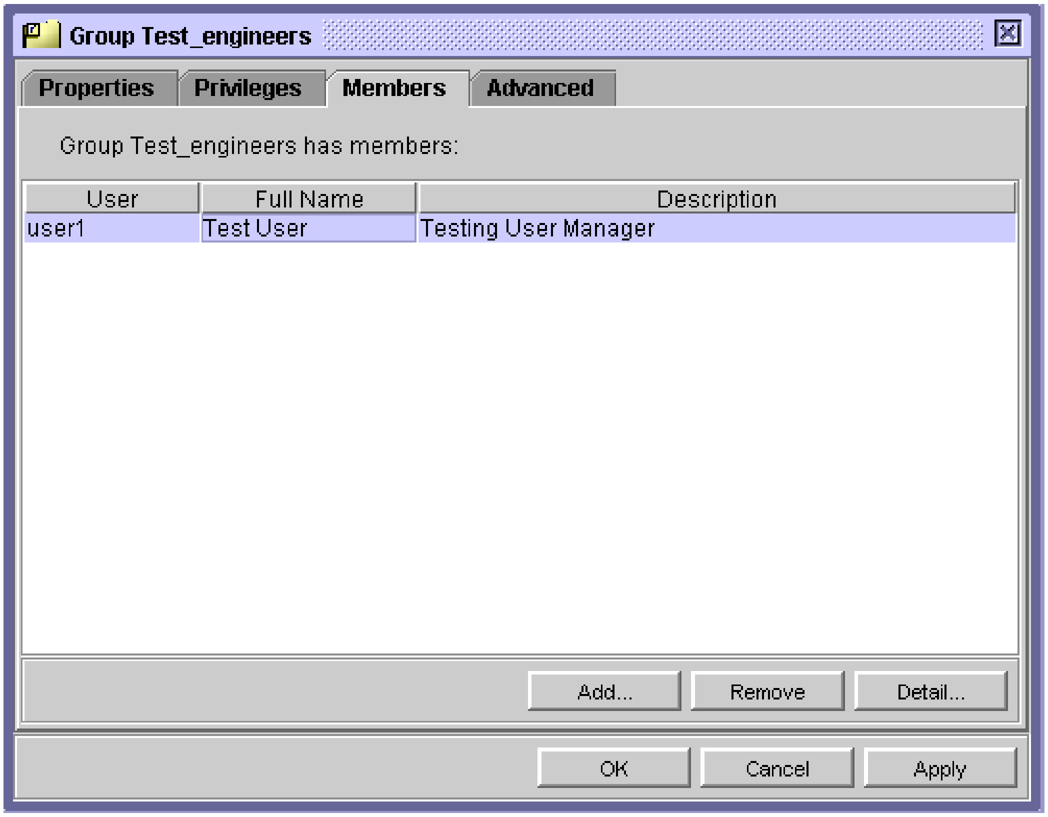
8. Click OK or APPLY in the parent screen to save the changes.

## Member Management

To view/add/remove the members for a selected group, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details. Choose the `Group` tab.
2. Choose a Group from the list displayed in the Group tab and click on the `Properties` button.
3. Click on the `Members` tab to view the members of the group.

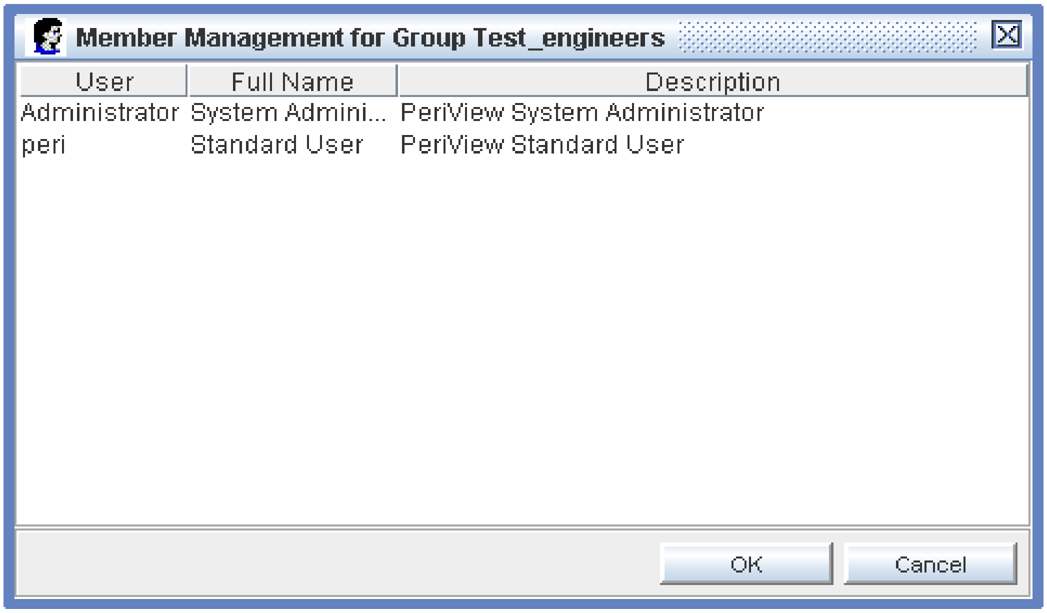
   The `Members` tab displays the users that are the members of the selected group.



Group Test_engineers has members:

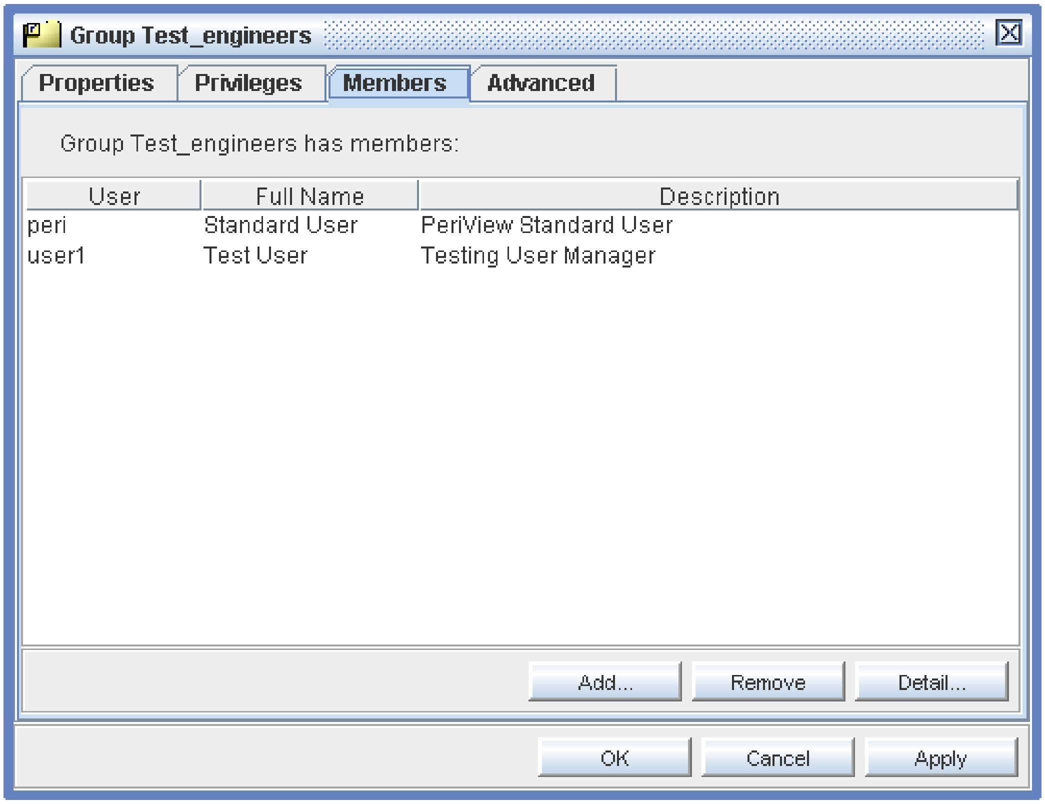
| User | Full Name | Description |
|---|---|---|
| user1 | Test User | Testing User Manager |

4. To add a user to the group, click on the ADD button. The Membership Management window appears.



| User | Full Name | Description |
|---|---|---|
| Administrator | System Admini... | PeriView System Administrator |
| peri | Standard User | PeriView Standard User |

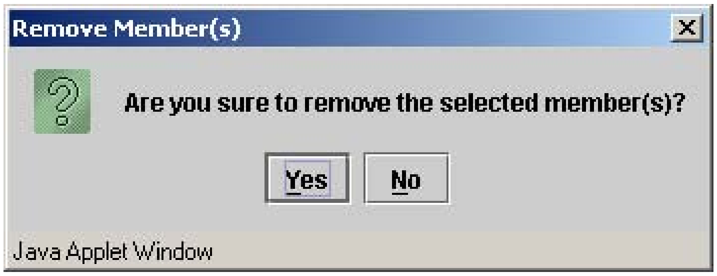
5. Choose the users that you wish to add to the selected group. Click OK. The users are now a member of the selected group and are displayed in the `Members` tab.



Group Test_engineers has members:

| User | Full Name | Description |
|---|---|---|
| peri | Standard User | PeriView Standard User |
| user1 | Test User | Testing User Manager |

6. To remove the members of a group, click on the REMOVE button. A popup dialog appears asking you to confirm that you wish to remove the selected members of the group.



Remove Member(s)

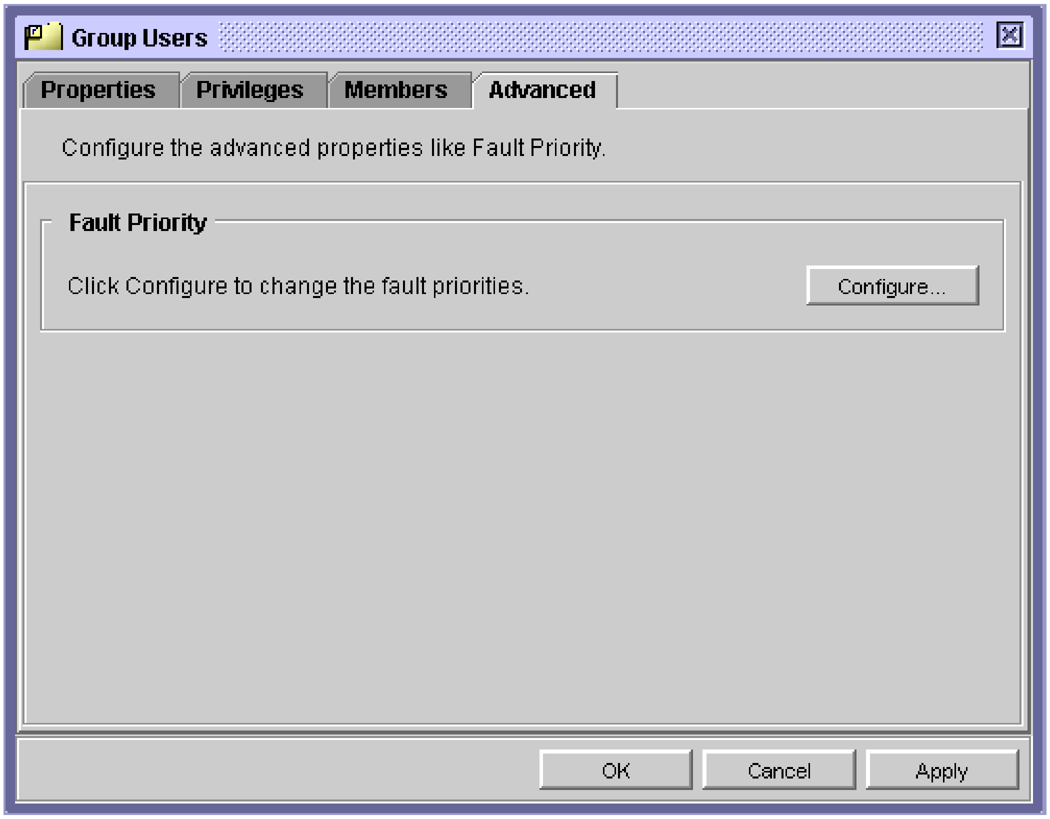
Are you sure to remove the selected member(s)?

7. Choose YES to remove the members from the group locally.
8. Click OK or APPLY button in the parent window to save the changes.
9. To get the details of the selected members, click on the DETAILS button. For more information, refer the Setting User Properties section.

## Group's Advanced Properties

To set the advanced properties for a selected group, proceed as follows:

1. Launch the `User Manager` window. Refer Launching the User Manager Plugin section for more details. Choose the `Group` tab.
2. Choose a group from the list displayed in the `Group` tab and click on the `Properties` button.
3. Click on the `Advanced` tab to configure the advanced properties like Fault Priority for the selected group.

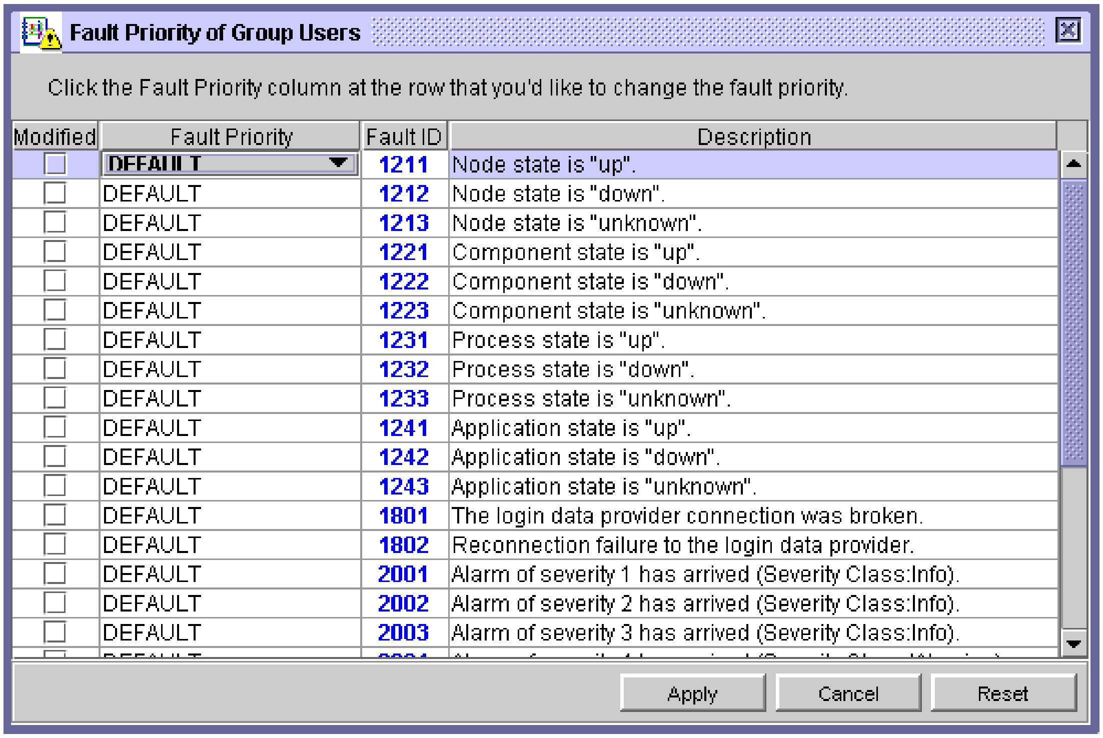


Configure the advanced properties like Fault Priority.

Fault Priority

Click Configure to change the fault priorities.

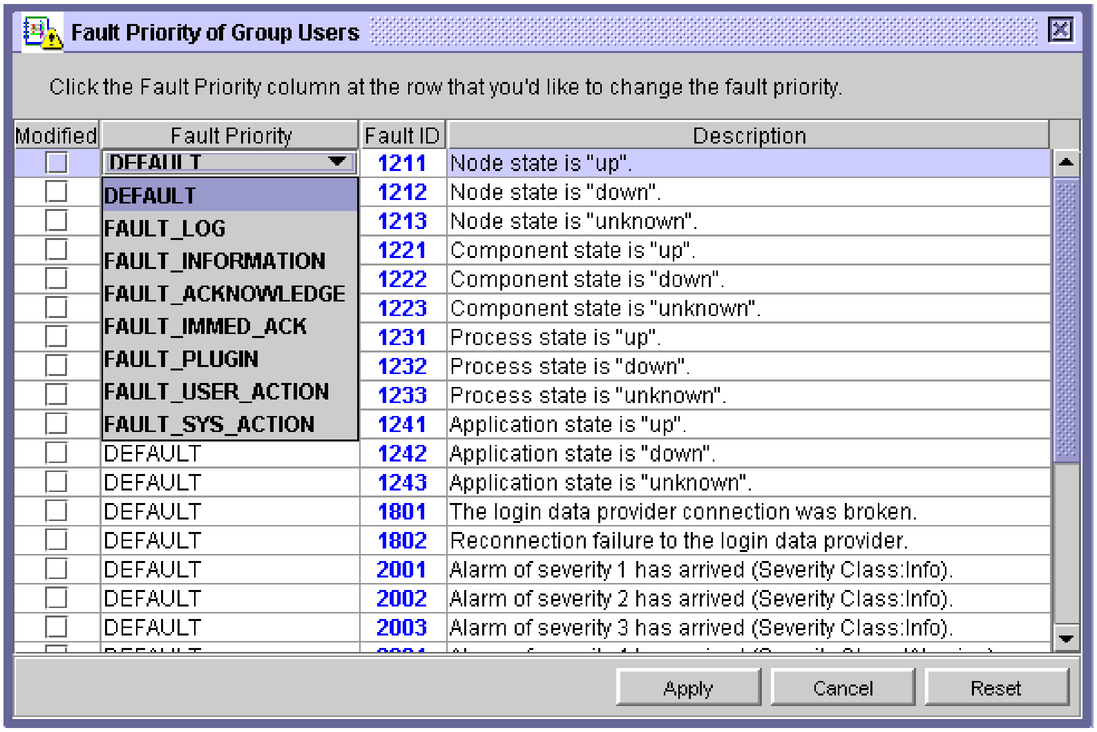
4. To configure the fault priorities for the selected group, click on the CONFIGURE... button.



Click the Fault Priority column at the row that you'd like to change the fault priority.

| Modified | Fault Priority | Fault ID | Description |
|---|---|---|---|
| □ | DEFAULT ▼ | 1211 | Node state is "up". |
| □ | DEFAULT | 1212 | Node state is "down". |
| □ | DEFAULT | 1213 | Node state is "unknown". |
| □ | DEFAULT | 1221 | Component state is "up". |
| □ | DEFAULT | 1222 | Component state is "down". |
| □ | DEFAULT | 1223 | Component state is "unknown". |
| □ | DEFAULT | 1231 | Process state is "up". |
| □ | DEFAULT | 1232 | Process state is "down". |
| □ | DEFAULT | 1233 | Process state is "unknown". |
| □ | DEFAULT | 1241 | Application state is "up". |
| □ | DEFAULT | 1242 | Application state is "down". |
| □ | DEFAULT | 1243 | Application state is "unknown". |
| □ | DEFAULT | 1801 | The login data provider connection was broken. |
| □ | DEFAULT | 1802 | Reconnection failure to the login data provider. |
| □ | DEFAULT | 2001 | Alarm of severity 1 has arrived (Severity Class:Info). |
| □ | DEFAULT | 2002 | Alarm of severity 2 has arrived (Severity Class:Info). |
| □ | DEFAULT | 2003 | Alarm of severity 3 has arrived (Severity Class:Info). |

5. Select the fault priority for the corresponding fault id as shown below. Fault ids are unique, predefined in PeriView and for PeriView internal use. Faults whose fault priorities are modifiable have appropriate descriptions.



Fault Priority of Group Users

Click the Fault Priority column at the row that you'd like to change the fault priority.

| Modified | Fault Priority | Fault ID | Description |
|---|---|---|---|
| ☐ | DEFAULT ▼ | 1211 | Node state is "up". |
| ☐ | | 1212 | Node state is "down". |
| ☐ | | 1213 | Node state is "unknown". |
| ☐ | | 1221 | Component state is "up". |
| ☐ | | 1222 | Component state is "down". |
| ☐ | | 1223 | Component state is "unknown". |
| ☐ | | 1231 | Process state is "up". |
| ☐ | | 1232 | Process state is "down". |
| ☐ | | 1233 | Process state is "unknown". |
| ☐ | | 1241 | Application state is "up". |
| ☐ | DEFAULT | 1242 | Application state is "down". |
| ☐ | DEFAULT | 1243 | Application state is "unknown". |
| ☐ | DEFAULT | 1801 | The login data provider connection was broken. |
| ☐ | DEFAULT | 1802 | Reconnection failure to the login data provider. |
| ☐ | DEFAULT | 2001 | Alarm of severity 1 has arrived (Severity Class:Info). |
| ☐ | DEFAULT | 2002 | Alarm of severity 2 has arrived (Severity Class:Info). |
| ☐ | DEFAULT | 2003 | Alarm of severity 3 has arrived (Severity Class:Info). |

6. For detailed description, refer Detailed Description of the Fault Priority of User screen. Click on APPLY to save the changes locally. To permanently save the changes made, click the OK button in the parent screen.

7. To reset the fault priority for the selected fault id, click on the RESET button. To save the changes made in the fault priority, click Apply in the User window as displayed in Step 3.

3

# Application Configuration

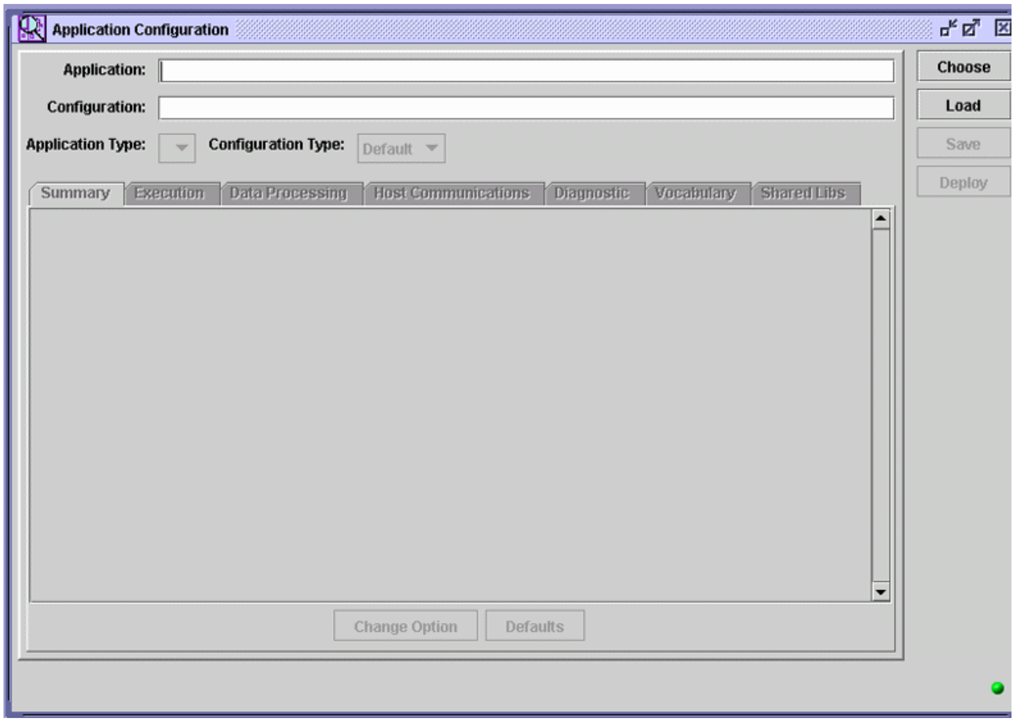
<u>This chapter covers:</u>

1. Launching the Application Configuration Plug-in
2. Introduction to Application Configuration
3. Configure Standard Applications
4. Configure VoiceXML Applications

## Launching the Application Configuration Plug-in

To launch the Application Configuration plug-in, open the PeriView GUI Main Screen as shown in Introduction to PeriView  on page 2. Click on the Application Configuration icon as displayed below.

The Application Configuration screen appears as follows:



## Introduction to Application Configuration

Use the Configure Applications tool to create the file that defines an application's execution parameters and run-time environment. For PeriProducer applications (a generated `.vex` file), the configuration file `(*.acfg)` is copied, along with the application's executable file `(*.vex)`, to the node where you assign the application. Although you can assign an application with a default configuration file, you can use this tool define individual configuration parameters.

For VoiceXML applications, the .acfg file is explicitly defined on the node (in the appropriate component directory) on which it runs. See "Configure VoiceXML Applications" on page 104.

### *Configurations Options*

Configuration options are categorized as follows:

- **Data Processing**
- **Host Communications**
- **Diagnostic**
- **Vocabulary**
- **Shared Libraries**
- **Execution Parameters**

Although you can define configuration options within the application itself, when you define these parameters in a configuration file, you can easily display and modify them with this tool.

An application can execute in either IVR mode (voice) or Web mode (Internet), depending upon the configuration parameters associated with the application.

#### File Requirements

Only a single configuration file can exist for an application at any one time. When you redefine an application's configuration, the existing file gets saved with new information. For standard applications, the file names of an application's configuration file (`*.acfg`) and executable file (`*.vex`) differ only with respect to the file extension.

During the assign process, if a configuration file is not located in the same directory as the application's executable file, the application is assigned with a default configuration.

During the assign process, application files and user shared libraries are copied from their source location to the designated directories on the node where they will process.

- **Executable file (**`*.vex`**) and configuration files (**`*.acfg`**) for all applications (main and linked) will be copied to the directory the following locations:**

  Solaris: `$MPSHOME/componentN/apps`

  Windows 2000:`%MPSHOME%\componentN\apps`

- **User shared libraries (**`*.so or *.dll`**) will be copied to the following locations:**

Solaris: `$MPSHOME/componentN/apps/lib`

Windows 2000:`%MPSHOME%\componentN\apps\lib`

## Configure Standard Applications

You configure standard (PeriProducer/.vex) applications in the Application Configuration window. A summary of the information required for these processes follows.

### Application

You must identify the name of the application's executable file (`*.vex`). For additional information, see ***Identify the Application to Configure*** on page 68.

### Application Type

Initially, you configure an application as main or linked.

When you configure a Main application, then you must continue to define the Configuration Type. And, for PeriProducer applications, you need to specify Defaults Settings.

When you configure a linked application, no other options apply. For additional information, see ***Define the Application Type*** on page 68.

### Configuration Type

A Main application is defined with either a Default or Custom Configuration.

When you configure default application, no other options apply.

When you create a Custom configuration, individual parameters are defined from within six option categories.

### Configuration Options

The six categories of configuration options include: Data Processing, Shared Libraries, Host Communication, Execution, Diagnostics, and Vocabulary.

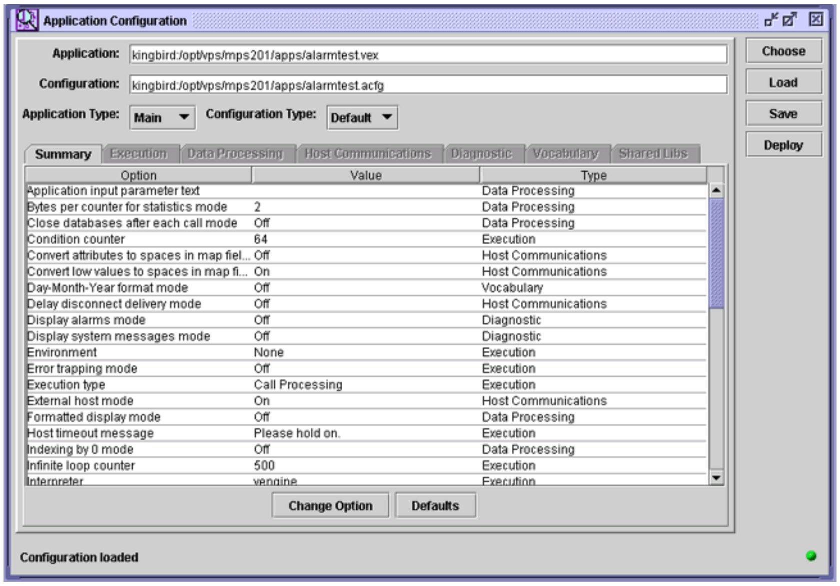
Each option is listed individually, in alphabetic order, in the Options Summary window. For additional information, see ***Define Custom Configurations*** on page 70.

### Save or Deploy

You must Choose Save to save the configuration file. You can also select Assign/Start to launch the Application Management tool for the application in the Configure Application window. For additional information, see ***Define Custom Configurations*** on page 70.

## The Application Configuration Window

Use the Configure Application window to create an application’s configuration file, which defines its run-time parameters. Initially, you define an application as either Main or Linked. While you can explicitly configure a main application’s options, no further configuration applies to linked applications. You can configure PeriProducer to include, by default, the parameters specified in the application’s executable file.



Application: kingbird:/opt/vps/mps201/apps/alarmtest.vex

Configuration: kingbird:/opt/vps/mps201/apps/alarmtest.acfg

Application Type: Main

Configuration Type: Default

| Option | Value | Type |
|---|---|---|
| Application input parameter text | | Data Processing |
| Bytes per counter for statistics mode | 2 | Data Processing |
| Close databases after each call mode | Off | Data Processing |
| Condition counter | 64 | Execution |
| Convert attributes to spaces in map fiel... | Off | Host Communications |
| Convert low values to spaces in map fi... | On | Host Communications |
| Day-Month-Year format mode | Off | Vocabulary |
| Delay disconnect delivery mode | Off | Host Communications |
| Display alarms mode | Off | Diagnostic |
| Display system messages mode | Off | Diagnostic |
| Environment | None | Execution |
| Error trapping mode | Off | Execution |
| Execution type | Call Processing | Execution |
| External host mode | On | Host Communications |
| Formatted display mode | Off | Data Processing |
| Host timeout message | Please hold on. | Execution |
| Indexing by 0 mode | Off | Data Processing |
| Infinite loop counter | 500 | Execution |
| Interpreter | vengine | Execution |

Configuration loaded

The Application Configuration window opens with pre-entered application and configuration information, if you launch the tool from either application objects or objects that have been assigned applications. You can configure individual options by selecting them from the alphabetized list in the Option Summary scrolling window.

Only a single configuration file can exist for each application at any time. When you redefine an application’s configuration, the existing file is saved with the new information. Configuration options are categorized as follows: Data Processing, Host Communications, Diagnostic, Vocabulary, Shared Libraries, and Execution. You define custom configurations either by selecting a category of options or by selecting individual parameters directly from the Options Summary display area.

The colored dot, in the bottom right corner of the window, indicates the state of configuration modifications. A **green** dot indicates that all edits are saved. A **red** dot indicates that there are unsaved edits.

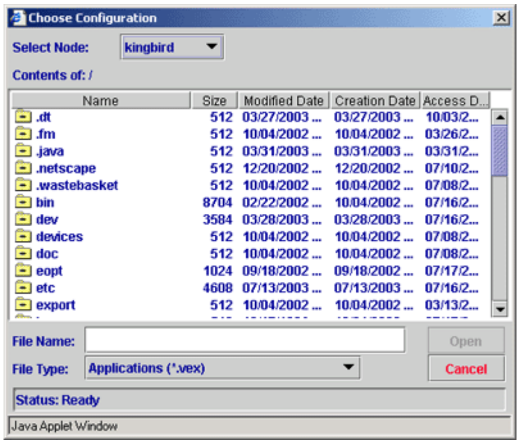
You must select Save to apply all edits to the configuration file.

### Identify the Application to Configure

Identify the name of the application's executable file. The executable file name (`*.vex`) and the configuration file name (`*.acfg`) are identical except for the file extension.

**To identify the application:**

- **Either type the full path name of the application's executable file (`*.vex`) or select** Choose **to display the Choose Configuration window and select the name of the executable file.**



Select Node: kingbird

Contents of: /

| Name | Size | Modified Date | Creation Date | Access D... |
|---|---|---|---|---|
| .dt | 512 | 03/27/2003 ... | 03/27/2003 ... | 10/03/2... |
| .fm | 512 | 10/04/2002 ... | 10/04/2002 ... | 03/26/2... |
| .java | 512 | 03/31/2003 ... | 03/31/2003 ... | 03/31/2... |
| .netscape | 512 | 12/20/2002 ... | 12/20/2002 ... | 07/10/2... |
| .wastebasket | 512 | 10/04/2002 ... | 10/04/2002 ... | 07/08/2... |
| bin | 8704 | 02/22/2002 ... | 10/04/2002 ... | 07/16/2... |
| dev | 3584 | 03/28/2003 ... | 03/28/2003 ... | 07/16/2... |
| devices | 512 | 10/04/2002 ... | 10/04/2002 ... | 07/08/2... |
| doc | 512 | 10/04/2002 ... | 10/04/2002 ... | 07/08/2... |
| eopt | 1024 | 09/18/2002 ... | 09/18/2002 ... | 07/17/2... |
| etc | 4608 | 07/13/2003 ... | 07/13/2003 ... | 07/16/2... |
| export | 512 | 10/04/2002 ... | 10/04/2002 ... | 03/13/2... |

File Name:

File Type: Applications (*.vex)

Status: Ready

- **Once you enter file name, select** Load **to update the Options Summary scrolling window with any existing configuration information and activate all other options in the window.**
  - If a configuration file exists in the same directory as the executable file, the application's current configuration displays. You can define parameters directly from Options Summary scrolling window.
  - If no configuration file exists in the same directory as the executable file:
    - The Application Type defaults to Main.
    - A PeriProducer application is configured using the values specified in the executable file (`*.vex`) and default values for all options that have not been explicitly specified.

If you launched the Application Configuration tool from an object to which an application was assigned, and if a configuration file exists in the same directory as the executable file, the window opens displaying the application's current configuration information and all parameters are active. You do not have to select Load to activate the Application Configuration window. There is no need to enter the application name, unless a different application is to be configured. If you enter the name of a different application, you have to select Load to activate options in the Application Configuration window.

### Define the Application Type

Configure the application as either Main or Linked. The Application Type defaults to

Main when creating a default configuration with the Application Management tool.

**To Define the Application Type:**

Select Main or Linked. (The system default is Main.)

Main: Configures the file as a main application. A main application performs a specific call processing or administrative function and can link to other applications during its execution cycle.

You can define Main applications with either default or custom parameters and assign them to either call processing or administrative phone lines, depending upon their function.

To define a custom configuration for a main application, select Custom as the Configuration Type (page 69) and proceed to define individual configuration options (page 66). Default application require no further configuration.

If you have completed your edits, you must select Save to save changes to the file. The symbol changes color from **red** to **green** when all changes have been saved. For additional information, see ***Save*** on page 72.

Linked: Configures the file as a linked application. A linked application can be shared by one or more main applications, which can link to them during their execution cycle. Linked applications are assigned only to MPS components; they are not assigned to phone lines.

When you assign linked applications, they display with the link icon in the Applications scrolling window of the Application Management tool. This icon also displays in the Component status window, to identify linked applications (if any) that are assigned to the MPS.

You can monitor the linking activity of main applications with the Linked Application Status graph, which you launch from the Activity Monitor. The main application and the applications to which it links, display as graph points.

The remaining configuration parameters do not apply to linked applications therefore, all other options are inactive. At this point, you must select Save to save edits to the file. The symbol changes color from **red** to **green** when all changes have been saved. For additional information, see ***Save*** on page 72.

## Define the Configuration Type

Configuration Type is defined as Default or Custom.

Select Custom to activate the Configuration Options tabs. Alternatively, you can specify custom values individual options at the Option Summary window.

**To define the Configuration Type:**

Select Default or Custom.

Default:

Default settings are option specific. A default setting represents the value for a configuration option, which is used in the absence of explicitly selecting a different value. For a description of each option and its default setting, see ***Configuration Options' Categories*** on page 73. (Default)

☞ The consequence of selecting Default is dependent upon the method by which the application was created (PeriProducer).

- When you select Default for a PeriProducer application, it is be configured using the values specified in the executable file (`*.vex`) and default values for all options that you have not explicitly specified.

☞ No other parameters apply default configurations and all other options are inactive. If you have completed your edits, you must select Save to save edits to the file. The symbol changes color from **red** to **green**, when all changes have been saved. For additional information, see ***Save*** on page 72.

Custom:

Select Custom to specify values for individual configuration options. The six Option Category buttons are activated and you can select a category of options from the following: Data Processing, Shared Libraries, Host Communication, Execution, Diagnostics, and Vocabulary.

The application is configured with the default value for each option that you do not explicitly define.

☞ For each category of options that you have modified, after you define the options within the category, you must select Apply, Reset, or Defaults from within the individual Option Category window to apply the edits to the Applications Configuration window. For additional information, see ***Define Custom Configurations*** on page 70.

☞ After you apply the edits within the individual Option Category windows, and when your edits are complete, you must select Save to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved. For additional information, see ***Save*** on page 72.

### Define Custom Configurations

Individual configuration options are categorized as: Data Processing, Shared Libraries, Host Communication, Execution, Diagnostics, and Vocabulary. These options can either be user defined or reset to their default settings on an individual basis.

**To define a custom configuration and save the configuration file:**

In the Application Configuration window, either select a category of options from the menu tabs or select options individually at the Options Summary scrolling window.

- **Using the Options Category tabs:**

  Select Data Processing, Shared Libraries, Host Communications, Execution, Diagnostic, or Vocabulary. The category of options displays with a tab. Refer to ***Configuration Options' Categories*** on page 73.

- **Using the Options Summary scrolling window:**

  Select an option in the Options Summary scrolling window.

  - Choose Change Option to display the option category tab for the selected parameter. Refer to ***Configuration Options' Categories*** on page 73.
  - Choose Defaults to reset all the options in the summary to its default value.

When you define options in the individual Option Category tabs:

- **Define values for the options within the category.**
- **Select Apply, Reset, or Defaults at the Option Category window.**

For specific information about configuring individual options within a category, see ***Configuration Options' Categories*** on page 73.

When you have defined all options, you must select Save in the Configure Application window to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved. For additional information, see ***Save*** on page 72.

### Save

When you have defined all options, you must select Save to save the configuration to a file. The configuration file is only created or updated after Save is selected.

- **If you close the window without saving the changes, you abort process without saving a configuration definition.**

Choose Save to save the configuration file. The dot changes color from **red** to **green**, when all edits have been saved.

After you select Save, only the Application name remains active. Other parameters in the Application Configuration window be inactive until Load is selected for a specific application.

### Deploy

Choose Deploy to launch the Application Management tool for the currently defined configuration.

  - If you selected Save before Deploy, the Application Management tool launches for the application with the newly saved configuration.
  - If you did not select Save before Deploy, the Application Management tool launches for the application with the existing configuration file. Any changes made in the Application Configuration window do not apply to the application unless you select Save before the launching the tool.

- **Close the Application Configuration window.**

  To abort the configuration process, close the Application Configuration window without selecting Save. If you attempt to close the window and there are unsaved applied edits, the symbol is **red** and a notice box displays to confirm the exit.

  - Select Yes to exit the window and abort the process without saving the edits.
  - Select No to continue with the configure application process.

## Configuration Options' Categories

The six categories of configuration options are identified in the following table. Each category of options displays with an individual tab. After defining the parameters you must select Apply to apply the changes to the Application Configuration window. Then, you must select Save in the Application Configuration window to save the configuration to a file.

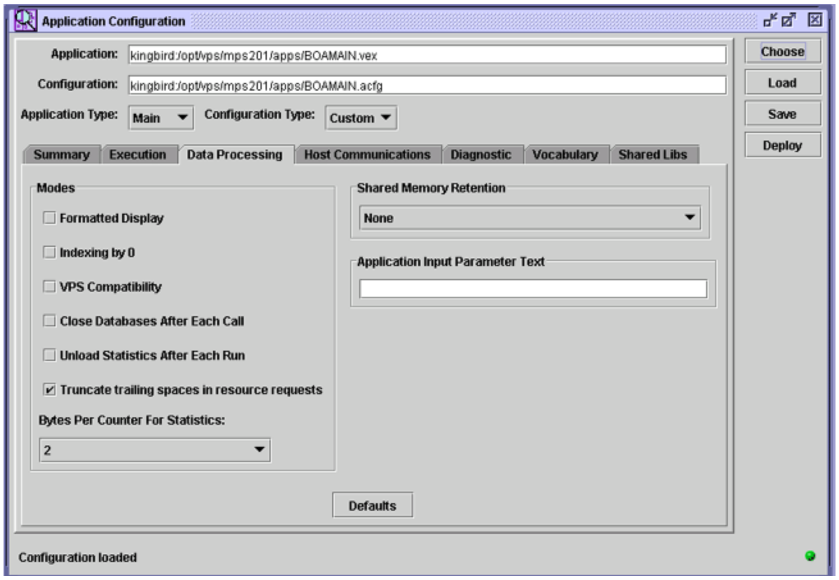
For information about saving a configuration file and launching the Application Management tool, see ***Save*** on page 72. For information about individual options categories, go to the page listed in the following table.

| Option Category | Configure | Go To |
|---|---|---|
| Data Processing | Data handling methodologies. | page 74 |
| Shared Libraries | User and System (3rd Party) shared libraries. | page 78 |
| Host Communication | External host communications. | page 81 |
| Execution | Run-time execution parameters. | page 84 |
| Diagnostics | Internal message reporting functions and source code debugging operations. | page 97 |
| Vocabulary | Vocabulary speech management functions. | page 100 |

At each of the six option category windows, use one of the methods described in the following table to specify the value for an option.

### Data Processing Options

Use the Data Processing category of configuration options to define data handling procedures. You can specify data processing Modes, how to handle items retained in shared memory, and define Application Input text.



Application: kingbird:/opt/vps/mps201/apps/BOAMAIN.vex

Configuration: kingbird:/opt/vps/mps201/apps/BOAMAIN.acfg

Application Type: Main

Configuration Type: Custom

Modes

- □ Formatted Display
- □ Indexing by 0
- □ VPS Compatibility
- □ Close Databases After Each Call
- □ Unload Statistics After Each Run
- ☑ Truncate trailing spaces in resource requests

Bytes Per Counter For Statistics: 2

Shared Memory Retention: None

Application Input Parameter Text:

Configuration loaded

**To configure Data Processing Options, define the following parameters.**

- **Modes: This group of options apply to data processing modes and include: Formatted Display, Indexing by 0, VPS Compatibility, and Unload Statistics After Each Run.**
  - **Formatted Display:**

    Numeric items can be displayed in either an unformatted or formatted mode.

    □ Disable Numeric Formatting.

    Numeric items display in an unformatted mode. This mode is standard in the internal MPS environment. Numerals, only, display without reference to sign or decimal place. (Default)

    ☑ Enable Numeric Formatting.

    Numeric items display in the formatted mode defined by the Picture Clause (PIC) in the application. Both sign and decimal place display.

  - **Indexing by 0:**

    The ASE process responsible for running applications, by default, does not support explicit array indexing by zero (0).

□ Disable Indexing by 0.

Disable this parameter for backward PeriProducer compatibility. (Default)

☑ Enable Indexing by 0.

Do not enable Indexing by 0 unless a legacy application does not execute successfully with this parameter disabled.

- **VPS Compatibility:**

  This option applies to backwards VPS compatibility for legacy applications written in pre VAS (Release 3) and Release 4 (VPS mode).

  It allows the application program to do both of the following:

  - speak the character string '`$1,234.45`' as Money (for example, the non-numeric characters `$, .` are ignored.)
  - move `1234` to `A` (where `A` is an array), without specifying an array index.

  □ Disable backward VPS compatibility. (Default)

  ☑ Enable backward VPS compatibility.

  You should not enable VPS Compatibility Mode unless a legacy application does not execute successfully with this parameter disabled.

- **Close Databases After Each Call:**

  HSAM and ISAM database files can either remain open or be closed when an application restarts (disconnects and recycles). This option allows for backward compatibility.

  □ Disable database files from closing after each call.

  HSAM and ISAM database files remain open when the application restarts. This option saves significant overhead. (Default)

  ☑ Enable database file closing after each call.

  HSAM and ISAM database files close when the application restarts. You should only enable this backward compatibility mode when your application does not execute successfully with the parameter disabled. This may be a solution for the problem that exists when all database related calls fail.

  You can initialize, erase, or get the status of database files at the VSH tool's System menu.

- **Unload Statistics After Each Run:**

The VSUPD process polls MPSs for application statistics in 15 minute intervals. Further, you can configure applications to pass application statistics to VSUPD each time a call terminates.

- If all application statistics are collected only when polled, large amounts of data are transferred at regular time intervals.
- If application statistics are transferred to VSUPD each time a call terminates, message traffic increases, but the amount of data transferred at regular intervals decreases (as some statistics generated in that time period have already been transferred).

Message traffic is distributed over a wider time period when you select to transfer statistics after applications terminate. Specify the option that is more successful in your operating environment.

□ Disable Unloading Statistics After Each Run.

Application statistics are be passed to VSUPD each time a call is terminated. VSUPD polls the MPS for statistics, regularly, at 15 minute intervals. (Default)

☑ Enable Unloading Statistics After Each Run.

Application statistics are passed to VSUPD each time a call is terminated and VSUPD polls the MPS for statistics, regularly, at 15 minute intervals.

- **Bytes Per Counter for Statistics:**

  You can define the number of bytes for the statistics counter in the statistics message format.

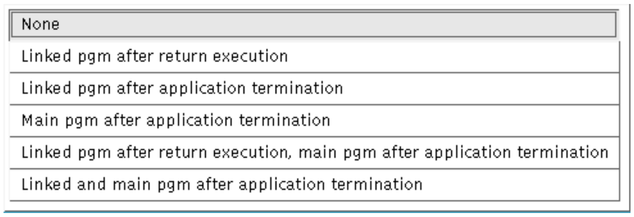
  The default statistics message format (2 bytes per counter, maximum 1800 fields per stat folder) can reduce VSUPD message traffic significantly, in comparison to the format used in releases prior to 5.3.0.

  You should use the smallest field size that is large enough to hold the counter range (1-byte field=255, 2-byte field=65535, 4-bytes fields = more than 4 billion). The VSUPD process automatically recognizes any message format.

☞ The stat format has changed as of Release 5.3.0. The option *Variable based on field name length* relates to the stat format prior to Release 5.3.0. This option should not be selected by anyone other than Certified Avaya support personnel.

- **Shared Memory Retainment:**

  This parameter allows for the shared memory items associated with main or linked applications to be preserved after the applications have terminated. Unless you configure shared memory to be reclaimed by the system, it is necessary to explicitly remove retained data to reallocate the area of memory to the system. The shared memory area can be examined with the VSH tool. Select one of the following options to define shared memory retainment.


None
Linked pgm after return execution
Linked pgm after application termination
Main pgm after application termination
Linked pgm after return execution, main pgm after application termination
Linked and main pgm after application termination

- None:

  Shared memory items are not retained for either main or linked applications. (Default)

- Linked pgm after return execution:

  Shared memory items of all linked programs are retained by the system after the linked application ends and execution control is returned to the main application. When the main program terminates, this memory is reclaimed by the system.

- Linked pgm after application termination:

  Shared memory items of all linked programs are retained by the system after the main application is terminated. Items specific to the main application are not retained.

- Main pgm after application termination:

  Shared memory items of the main programs are retained by the system after the application is terminated.

- Linked pgm after return execution, main pgm after application termination:

  Shared memory items of the linked programs are preserved while the main program is active. When the main program terminates, shared memory from linked programs is reclaimed and the shared memory of the main program is preserved.

- Linked and main pgm after application termination:

  All shared memory items of the main and linked applications are preserved after the main application terminates.

- **Application Input Parameter Text:**

  This option allows for data to be passed from the configuration file to the application, when you start the application. This can include user entered data or file-based data that is to be used as input by the application. Also, Input Parameter Text can be made accessible to programs that are linked to the application you are configuring.

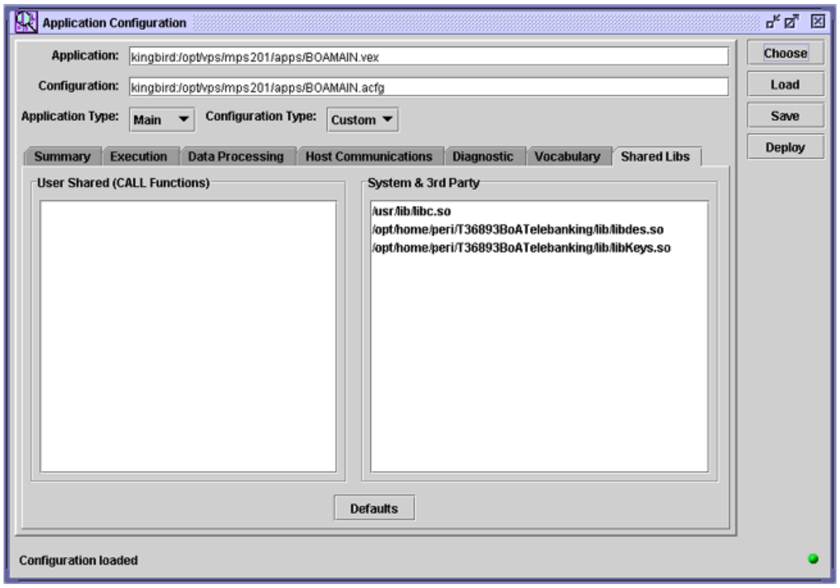
Once you have defined all shared libraries for this application, you can select Defaults to set the parameters back to their default values.

When you have defined all options, you must select Save in the Application Configuration window to save edits to the file. The symbol changes color from **red** to

**green**, when all applied edits have been saved. For additional information, see ***Save*** on page 72.

### Shared Libraries

Use the Shared Libraries category of configuration options to identify the libraries that the application may need to access during its execution cycle.



Application: kingbird:/opt/vps/mps201/apps/BOAMAIN.vex

Configuration: kingbird:/opt/vps/mps201/apps/BOAMAIN.acfg

Application Type: Main

Configuration Type: Custom

```
/usr/lib/libc.so
/opt/home/peri/T36893BoATelebanking/lib/libdes.so
/opt/home/peri/T36893BoATelebanking/lib/libKeys.so
```

Configuration loaded

### User Shared Libraries

User shared libraries (Call Functions) are defined by PeriView users.

You identify the user shared libraries that an application requires at the User Shared (Call Functions) scrolling window. Use the Edit menu button to add and remove files from the scrolling window and reorder the listing.

The library file name must contain the extension `.so` or `.dll` and the full path name needs to be defined in the window.

The user shared libraries that are listed and selected, are copied to the component (during the Assign process) and made available to the application during its execution cycle.

User shared libraries (`*.so or *.dll`) are copied to the component, along with the executable (`*.vex`) and configuration files (*`.acfg`), during the Assign process (using the Application Management tool).

Executable file (`*.vex`) and configuration files (`*.acfg`) for all applications (main and linked) will be copied to the directory the following locations:

Solaris: `$MPSHOME/component_typeN/apps`

Windows 2000:`%MPSHOME%\component_typeN\apps`

User shared libraries (`*.so or *.dll`) will be copied to the following locations:

Solaris: `$MPSHOME/component_typeN/apps/lib`

Windows 2000:`%MPSHOME%\component_typeN\apps\lib`

- Any selected library, that does not exist in the destination directory, is copied when the application is assigned.
- If a selected library already resides in the destination directory, then the recopying of that library (during the Assign process) depends on your response to the option Copy User Shared Libraries (in the Application Management window).

### System and 3rd Party Shared Libraries

System and 3rd Party shared libraries are libraries that were not been created by the user.

- First, you need to copy any system and 3rd Party shared libraries, which the application may need during its execution cycle, to the MPS component before you identify them in the scrolling window.
- Then, you enter and select the System and 3rd Party shared libraries required by the application at the System and 3rd Party scrolling window. Use the Edit menu button to add and remove files from the scrolling window and reorder the listing.

The library file name must contain the extension `.so or .dll` and the full path name needs to be defined in the window.

The libraries that are listed and selected are associated with the application and are available during its execution.

### Linked versus Main Applications

When a linked application requires a shared library, the shared library is configured for the main application—not the linked application. (Custom configuration options can be defined only for main applications.)

### Library Search Order

The selected libraries are associated with the application being configured in the order in which they are listed in the library scrolling windows. Libraries are searched, sequentially, in the order in which they are associated with the application.

If the order in which libraries are searched is important to the application, ensure that the selected libraries are listed in the order they are to be searched.

You can reorder the list from either a menu or with the up and down arrows buttons.

### Identify Shared Libraries

The process for identifying shared libraries is the same for both User Shared (Call Functions) and System & 3rd Party shared libraries.

**To configure shared libraries, define the following parameters.**

- **Select Edit to and choose Add Another, Remove, or Move.**

  Add Another: Choose Add Another to display the File Chooser. Use the File Chooser to locate and select existing shared library files.

  Remove: Choose Remove to remove Selected or All shared library file names from the display area. This allows for quick removal of unwanted data. Remove only clears the display area(s) of data. The files themselves remain unaltered.

  Move: Choose Move to display the move menu and reorder the listing in the display area.

  When an application is assigned to a location, selected libraries are associated with the application in the order in which they are listed. During the application's execution cycle, when libraries are needed, they are searched sequentially, in the order in which they were associated with the application. To reorder the list:

  - Select one or more lines.
  - Use the <RIGHT> mouse button and select Up or Down to move the selected location(s) up or down on the list.

  Alternatively, reorder libraries with the up and down arrow buttons located under each scrolling window. ⬆ ⬇

  ⬆ <LEFT> click the mouse button on the up arrow to move the selected location(s) up on the list.

  ⬇ <LEFT> click the mouse button on the down arrow to move the selected location(s) down on the list.

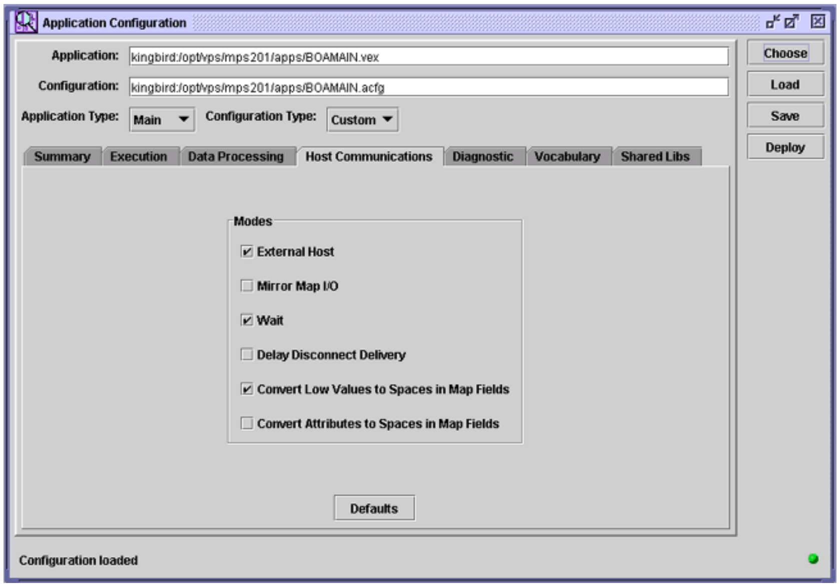
☞ Once you have defined all shared libraries for this application, you can select Defaults to set the parameters back to their default values.

☞ When you have defined all options, you must select Save in the Configure Application window to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved. For additional information, see ***Save*** on page 72.

The selected shared libraries that are actually copied from their source directory to the MPS depend on the parameter Copy User Shared Libraries.

### Host Communications Options

Use the Host Communications category of configuration options to define communication modes between an application and its external host.



Application: kingbird:/opt/vps/mps201/apps/BOAMAIN.vex

Configuration: kingbird:/opt/vps/mps201/apps/BOAMAIN.acfg

Application Type: Main

Configuration Type: Custom

Modes

☑ External Host

□ Mirror Map I/O

☑ Wait

□ Delay Disconnect Delivery

☑ Convert Low Values to Spaces in Map Fields

□ Convert Attributes to Spaces in Map Fields

Configuration loaded

**To configure Host Communications Options, define the follow parameters.**

- **External Host:**

  Enable or Disable communication between this configuration of the application and an external host computer.

  ☑ Enable External Host Communications.

  Enable host communications if the application is communicating with an external host computer. (Default)

  □ Disable External Host Communications.

  Disable host communications if the application is not communicating with an external host computer.

- **Mirror Map I/O:**

  This parameter enables or disables the display of maps in a separate window during an applications's execution. Visually displayed maps aid in debugging operations.

□ Disable Mirror Map I/O.

Maps do not display in a separate window. (Default)

☑ Enable Mirror Map I/O.

Maps display in a separate window.

For additional information about mirror maps, refer to the section Mirroring Host Interaction (Real Mode) in the *PeriProducer User s Guide*.

- **Wait:**

  This parameter determines whether Phone Line I/O waits or proceeds while there are outstanding Host I/O requests.

  ☑ Enable Wait Mode:

  Phone Line I/O waits while there are outstanding Host I/O requests. (Default)

  □ Disable Wait Mode.

  Phone Line I/O occurs regardless of the state of Host I/O. Phone Line I/O is permitted to interrupt Host I/O.

- **Delay Disconnect Delivery:**

  You can specify either of the following:

  - an application stop playing the message `Please hold on` as soon as it received a condition **`disc`**.
  - the application ignores the condition **`disc`** when it arrives and continues to play the message `Please hold on` until the next phone line related command is received (even though the caller hung up).

  Examples:

  - If you disable delay disconnect delivery, as soon as the condition `disc` arrives the application stops playing the message `Please hold on`.
  - If you enable delay disconnect delivery, the application continues to play the message `Please hold on` while waiting for a message from the host or CCM, even though the condition `disc` arrived.

  □ Disable Delay Disconnect Delivery.

  An application responds immediately if a condition `disc` arrives and stop playing the message `Please hold on`, even if it is waiting for a host or component message. (Default)

☑ Enable Delay Disconnect Delivery.

An application ignores the condition `disc` until the next CCM or host command is received. The application continues to play the message `Please hold on` while waiting for a host or CCM command, even though the condition `disc` arrived. You should not enable this backward compatibility mode unless your application does not execute successfully with the parameter disabled.

- **Conversion of Low Values Into Spaces in Map Fields:**

  This parameter determines whether low value constants (non-printable characters) are converted to spaces in map fields.

  ☑ Enable Conversion:

  Low values are converted to spaces in map fields. (Default)

  □ Disable Conversion.

  Low value constant is inserted in map fields.

- **Conversion of Attributes Into Spaces in Map Fields:**

  This parameter determines whether the attribute bytes in map fields retain their definition or are converted to spaces.

  □ Disable Conversion:

  Attribute bytes retain their definition in map fields. (Default)

  ☑ Enable Conversion.

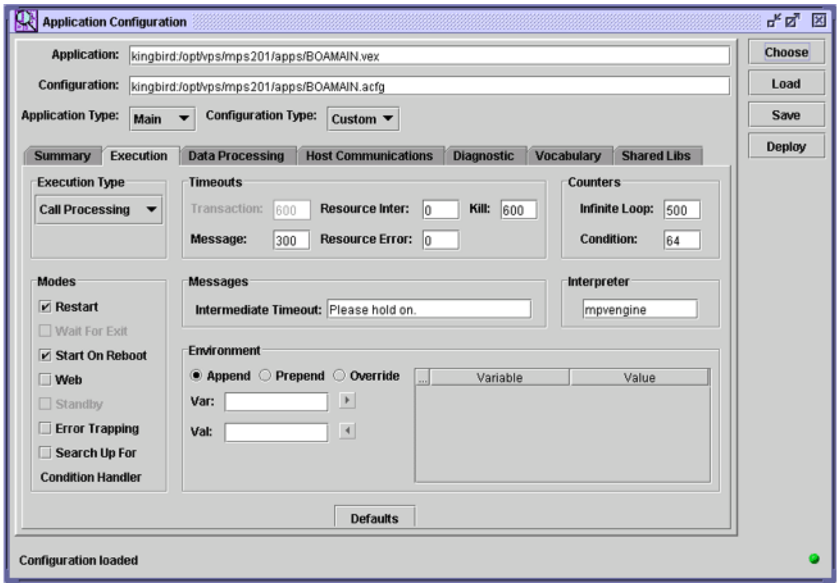
  Attribute bytes are converted to spaces in map fields.

☞ Once you have defined all host communications for this application, you can select Defaults to set the parameters back to their default values.

☞ When you have defined all options, you must select Save in the Configure Application window to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved. For additional information, see ***Save*** on page 72.

### Execution Options

Use the Execution category of configuration options to define parameters specific to the application's execution cycle. When an application terminates due to exceeding these parameters, it restarts automatically only if you enable the Restart Mode. If Restart is disabled, you need start the application with the Application Management tool.



Application: kingbird:/opt/vps/mps201/apps/BOAMAIN.vex

Configuration: kingbird:/opt/vps/mps201/apps/BOAMAIN.acfg

Application Type: Main    Configuration Type: Custom

Execution Type: Call Processing

Timeouts: Transaction: 600    Resource Inter: 0    Kill: 600    Message: 300    Resource Error: 0

Counters: Infinite Loop: 500    Condition: 64

Modes:
- ☑ Restart
- □ Wait For Exit
- ☑ Start On Reboot
- □ Web
- □ Standby
- □ Error Trapping
- □ Search Up For Condition Handler

Messages: Intermediate Timeout: Please hold on.

Interpreter: mpvengine

Environment: ● Append ○ Prepend ○ Override
Var:
Val:

Configuration loaded

Execution options are categorized as, Execution Type, Modes, Timeouts, Counters, Messages, Interpreter, and Environment. Default values are parameter-specific and vary with your selections.

**To configure Execution Options, define the following parameters.**

- **Execution Type:**

  Define the execution type as either Call Processing or Administrative.

  - **Call Processing**

    Call processing applications are designed to interact with callers. They receive incoming calls, transmit data to the caller, and acquire data from the caller until the call transaction is complete. You need to assign call processing applications to physical phone lines, which are equipped to process calls. (Default)

    Physical phone lines display as **blue**, **green** or **yellow** call processing phone line icons in the Locations sections of the Application Management tool and **blue** or **green** icons in the Application Management tool.

    You must configure any application that handles message retrieval as Call Processing. Further, you must configure these applications to repeat the call processing cycle for new calls each time the execution cycle for a call is complete (see Restart Mode).

  - **Administrative**

    Administrative applications are designed for system maintenance and administrative data processing tasks that support call processing applications. These operations can include resetting a counter or reintializing shared memory. It is important that applications performing prerequisite functions both start and complete their execution cycle before applications that depend them (see Wait for Exit) start.

    Administrative applications that you configure to Wait for Exit display the initialization icon in the Application Management tool.

    Typically, administrative applications do not need to be assigned to phone lines that are equipped to process calls (physical lines). You should assign these applications to an MPS's logical lines (lines that are not connected to any physical phone line), leaving the lines that are actually connected to phone line ports available for call processing applications.

    Logical phone lines display as **blue**, **green** or **yellow** administrative phone line icons in the Locations sections of the Application Management and **blue** or **green** icons in the Application Management tool.

- **Modes:**

  This group of options apply to execution modes and include: Restart, Wait for Exit, Start on Reboot, Web, Standby, and Error Trapping.

  - **Restart Mode:**

    Restart Mode refers to the ability of an application to repeat the call processing cycle for a new call, when the execution cycle for the current call is complete.

    Enable the restart mode to restart an application at the conclusion of each execution cycle. Disable the restart mode to force the application to terminate after conclusion of the initial execution cycle.

    Call processing applications, by design, process calls one call at a time. That is, when the execution cycle for call is complete, the application is ready to accept the next call. You must enable the restart mode for this to occur. If you disable restart mode, the application terminates after execution of the first call cycle.

    Typically, administrative applications, because of the nature of the jobs they perform, should not restart when they complete their execution cycle. (For example, applications that perform initialization operations probably should terminate after a single execution cycle.)

    ☑ Enable Restart.

    The application execute recurrently. It can be terminated by selecting Terminate with the Application Management tool. (Default for Call Processing applications)

    □ Disable Restart.

    When the application terminates, it does not restart automatically. It must be restarted by selecting Start with the Application Management tool. (Default for Administrative applications)

  - **Wait for Exit Mode:**

    The Wait for Exit mode allows an application to execute completely before the next application starts. Applications start in the order in which selected applications are listed in the Locations scrolling window in the Application Management tool. This parameter applies only to applications that you configured as Administrative at the Execution Type parameter. (It is inactive when you select Call Processing as the Execution Type.)

    Typically, administrative applications perform prerequisite initialization or maintenance functions needed for the successful execution of other applications. These functions can include resetting a counter or reintializing shared memory. This parameter allows for applications performing prerequisite functions to execute completely, before the next application starts.

☑ Enable Wait for Exit.

No other application is assigned or started until this application completes its execution cycle. Select this option for applications that perform prerequisite initialization functions, to ensure that they complete the tasks on which other applications depend. (Default)

⌛ Applications enabled to Wait for Exit display with an initialization icon. This icon displays in the Applications and Locations sections of the Application Management tool; in the Locations section in the Application Management tool; and in the Lines section of the Line Start Order During Reboot tool.

You must select Hard Terminate to terminate any application configured `Wait for Exit`.

□ Disable Wait for Exit.

Once this application starts, subsequent applications are assigned and started without waiting for this application to complete its execution cycle. Select this option for administrative applications that are functionally independent of other applications. If other applications depend on this application, enable this parameter.

- **Start on Reboot Mode:**

  Use this parameter to indicate that an application starts during system reboot. The default order in which applications are assigned/started when the system reboots is controlled with the Reorder action.

  Although all applications listed in the tool's window is assigned, this parameter determines which of the applications actually start when the system reboots.

  ☑ Enable Start on Reboot.

  The application starts automatically, during system reboot, in the order that applications are listed in the Line Start Order During Reboot tool.(Default)

  □ Disable Start on Reboot.

  The application does not start automatically at system reboot. If you want to restart the application, you must explicitly restart it by selecting Start with the Application Management tool.

  Applications configured not to restart display with a **blue** application initialization icon. This icon displays in the Applications and Locations sections of the Application Management tool; in the Locations section in the Application Management tool; and in the Lines section of the Line Start Order During Reboot tool.

- **Web Mode:**

  This parameter applies to applications that execute over the Internet. Select Web mode to configure an application to execute as a Web application, as opposed to an application that execute on telephone lines.

  You can run a web application by either of two methodologies. The web application can be configured as a main application or as a linked application, which executes in conjunction with a Standby application.

  Although both of these methods can be used to run a web application, typically, they are run with the Linked/Standby Application methodology. The benefit of the Linked/Standby method is that a pool of phone lines can be dedicated to web application processing.

  These lines can then be associated dynamically with web applications on an as-need basis. The Main Application methodology requires that a specific web application be associated with a specific phone line, which is a much more restrictive approach.

  - Main Application Methodology:
    - Configure the web application as a main application, enable Web mode, and disable Standby mode.
    - Assign and Start the web application.
  - Linked/Standby Application Methodology:

- Copy the file `web-standby.vex` to `~peri`.This file resides in the following locations:

  Solaris: `$PWEBHOME/link/web-standby.vex`
  Windows 2000: `%PWEBHOME%\link\web-standby.vex`
- Configure the web application as a linked application.
- Configure the Standby Application as a main application, enable Web mode, and enable Standby mode.
- Assign and Start the (main) Standby Application at selected locations.
- Assign the (linked) web application to the node where the Standby Application was assigned.

If you need different configurations for Standby Applications, copy the `web-standby.vex` file to a different file name and configure it appropriately.

□ Disable Web Mode.

The application is configured as a voice application (IVR) and executes on telephone lines. Standby mode and Maximum Call Length timeout are be inactive. (Default)

☑ Enable Web Mode.

The application is configured as a Web application and executes over the Internet. The parameters Standby and Maximum Call Length are activated only when Web Mode is enabled.

- **Standby Mode:**

  This parameter applies to applications that execute over the Internet and is active only when Web Mode is enabled. (It is inactive when Web Mode is disabled.)

  It allows the VENGINE process to be started without an associated application. This allows applications to be dynamically assigned to the VENGINE process on an as-need basis.

  □ Disable Standby Mode.

  Use this option when you are configuring a web application as a main application, to which a VENGINE process is specifically associated. When you start the application (with the Application Management tool) a VENGINE process starts for this application. (Default)

  ☑ Enable Standby Mode.

  Use this option when configuring a Standby Application to be used in conjunction with a web application that has been configured as linked. When you start the Standby application (with the Application Management tool) a VENGINE process starts without associating it with a specific application.

  Use Standby mode when a phone line is configured for an Internet application but, the specific application that is to run on the line, eventually, is selected from a menu. This procedure encompasses the following actions.

  - The Standby application is configured as a Main application with Standby enabled. Then, it is assigned and started at one or more locations.
  - To enable a web application to run at Standby locations, assign a specific web application, which has been configured as a Linked application, to the component where the Standby application has been assigned and started. At that point, the web application is enabled to run on the phone line to which the Standby Application has been assigned.
  - At some point, someone selects the application that actually is assigned to a Standby location, from the initial menu. Applications listed on the menu represent those applications that have been configured as a linked applications and assigned to a component (see above).

- **Error Trapping Mode:**

  Typically, if a condition is generated in an application, and the application does not explicitly handle or ignore the condition, PeriProducer handles the condition using the generic `error` condition. This methodology is appropriate for all but two conditions that can be generated by an application.

  Error Trapping Mode applies specifically to the two conditions (`linkdown` and `calltim`) that should be explicitly handled in order to gain control over the consequences, if these errors are generated.

  - A `linkdown` condition occurs when contact with a MPS's VOS process is lost. By default, when an unhanlded `linkdown` condition occurs, the application terminates.
  - A `calltim` condition occurs when The Maximum Call Length parameter expires and the call terminates. Maximum Call Length applies to Web Mode applications and is defined in the Timeouts category of Execution Options.

  `linkdown` and `calltim` conditions should be explicitly handled. It is poor practice to allow them to go unhandled.

  □ Disable Error Trapping.

  Unhandled `linkdown` and `calltim` conditions are not trapped by the generic `error` condition (PeriProducer's generic trap). When an application generates a `linkdown` or `calltim` condition, the application terminates, unless the application explicitly handles the condition.

  ☑ Enable Error Trapping.

  Unhandled `linkdown` and `calltim` conditions are trapped by the generic `error` condition (PeriProducer's generic trap), which is used for all unhandled error conditions.

- **Search Up for Condition Handler Mode**

  By default, vexlinked applications will only search for a condition handler within themselves. If a condition is not explicitly handled in the vexlinked application, it is treated as an unhandled condition.

  The “Search Up” mode specifies that the vexlinked application should also check the linking application for a condition handler (if there is no appropriate condition handler in the lined application). If the condition is handled in the linking application, that handler path is used.

☞ Refer to the *PeriProducer User s Guide* for more information on vexlinked applications.

□ Do Not Search Up for Condition Handler

Conditions that are not explicitly handled in vexlinked applications are treated as unhandled conditions

☑ Search Up for Condition Handler

If an unhandled condition occurs in a vexlinked application, the system checks for a condition handler in the linking application.

- **Timeouts (seconds):**

  This group of options apply to timeout values and include: Maximum Call Length, Resource Inter timeout, Resource Error timeout, Message timeout, and Kill timer.

  - **Transaction:**

    This parameter applies only to web applications and is active only when you enable Web Mode. Enter the number of seconds to define the transaction length for the web application (the time it takes for the user to respond to a request). This parameter applies to the transaction period for the host, component, and user — and applies only to web applications.
    (Default 600 seconds)

    When this timer expires, the application receives the condition `webtimeout` Unless the application explicitly handles the condition, the call terminates when it exceeds the length you specified. If Web Mode is disabled the parameter is inactive.

⚠ You should not set this parameter to zero (0) as it disables the Maximum Call Length. If this parameter is disabled, the application could be blocked for an undetermined amount of time waiting for user’s input.

☞ The Message timeout (which you define at the following parameter) is not triggered, as it is disabled in Web mode for user inquiry/response time.

- **Message Timeout:**

  This value represents the internal message timeout parameter. Message timeout determines the amount of time to wait for a response to each message that requires a response before a call can be terminated. (Default is 60)

  This parameter can apply to the inquiry/response period for the host, the component, and the user — depending upon the application's method of execution.

  - In IVR mode (application executes on telephone lines) this parameter applies to the inquiry/response period for the host, component, and user. An application executes in IVR mode when Web mode is disabled.
  - In web mode (application executes on the Internet) this parameter applies to the inquiry/response period for the host and component, not the user. An application executes in Web mode only when Web mode is enabled.

  When the time interval is exceeded, the application receives the condition `vrto`, which terminates the call if the condition is not handled. Enter the maximum number of seconds for the Message Timeout.

  The value for Message Timeout must be greater than the value for Resource Errortimeout, otherwise the application receives a `vrto` condition, before the Intermediate Timeout Message is played.

- **Kill Timer:**

  The kill timer sets the amount of time that an application can remain active after a soft termination signal is issued. The application terminates when the maximum time interval is exceeded. Set the kill timer to a specified number of seconds. (Default is 600).

- **Resource Inter:**

  The Resource Intertimeout parameter determines the interval during which the Intermediate Timeout Message is played. This parameter applies to the inquiry/response period for the component, not the host or the user.

  This parameter is disabled (assigned a value of zero) by default. To enable this parameter, enter the number of seconds at which to set this timer. When the timer expires, the application receives the condition `intertimeout` and the system plays the Intermediate Timeout Message (`Please hold on`) to the caller. This message can be redefined at the Execution Option—Intermediate Timeout Message.

  The message is only played if this parameter is less than the Resource Errortimeout parameter (defined at the following parameter).

  For information on programming for components, refer to the *Application Features Guide* and the *PeriProducer User s Guide*.

- **Resource Error:**

  The Resource Errortimeout parameter determines the total length of time of any one inquiry/response period, before the call can be terminated. This parameter applies to the inquiry/response period for the component, not the host or the user.

During the time specified at this parameter, the Intermediate Timeout Message (`Please hold on`) is played to the caller at the frequency determined by the Resource Intertimeout parameter (defined by the previous parameter). This message can be redefined at the Execution Option—Intermediate Timeout Message.

This parameter is disabled (assigned a value of zero) by default. To enable this parameter, enter the number of seconds at which to set this timer. When the timer expires, the application receives the condition `ertimeout` which terminates the call if the condition is not handled.

☞ The Resource Errortimeout parameter should be less than the Message Timeout parameter or the message playing interval is aborted when the Message Timeout parameter is exceeded.

☞ For information on programming for components, refer to the *Application Features Guide* and the *PeriProducer User s Guide*.

- **Counters:**

  This group of options apply to counter values and include: Infinite Loop Counter and Condition Counter.

  - **Infinite Loop Counter:**

    The infinite loop counter tracks the number of times that an application executes the same segment of code, repeatedly, without performing any useful input or output function. The application terminates when the infinite loop counter value is exceeded. Enter the maximum number of times an application can loop before it terminates. A value of zero (0) disables this counter. (Default is 500).

  - **Condition Counter:**

    The condition counter tracks the number of times that an application generates the same status/exception condition. The application terminates when the condition counter value is exceeded. Enter the maximum number of times a condition can generate before the application terminates. A value of zero (0) disables this counter. (Default is 64)

- **Messages (Intermediate Timeout):**

  Enter the message text. This message plays to the caller during the wait time between an inquiry and its response. Message playing is triggered by both the host and component timeout parameters. The message text defaults to `Please hold on` unless a different message is entered at this parameter.

  - Host Timeout Parameters:

    The host timeout period and the interval at which the Intermediate Timeout Message is played can be defined with the `er` and `intime` parameters in either the `commgr.cfg` file or within the application.

    - The `intime` parameter determines the interval at which the Intermediate

Timeout Message is played. This parameter applies to the inquiry/response period for the host, not the component or the user.

When this timer expires, the application receives the condition `intime` and the system plays the Intermediate Timeout Message (`Please hold on`) to the caller. The message is only played if this parameter is less than the **er** parameter.

- The `er` (inquiry/response) parameter determines the total length of time of any one inquiry/response period, before the call can be terminated. This parameter applies to the inquiry/response period for the host, not the component or the user.

  During the time specified at this parameter, the Intermediate Timeout Message is played to the caller at the frequency determined by the `intime` parameter. Once the `er` parameter is exceeded, the application receives the condition `ertimeout`, which terminates the call if the condition is not handled.

The Message Timeout parameter determines the total length of time of any one inquiry/response period, before the call can be terminated. This parameter applies to the inquiry/response period for the host, the component, and the user. The Message Timeout parameter can be defined at the Execution Option—Message Timeout.

The `er` parameter should be less than the Message Timeout parameter or the message playing interval is aborted when the Message Timeout parameter is exceeded.

For additional information about defining the `commgr.cfg` file, refer to the *Communications Configuration Reference Manual*. For information about defining the host environment option, refer to the *PeriProducer User s Guide*.

- Resource Timeout Parameters:

  The Resource Timeout parameter and the interval at which the Intermediate Timeout Message is played can be defined within an application or with the Execution Options—Resource Intertimeout and Resource Errortimeout parameters. For information about defining Resource Timeout parameters, refer to the *PeriProducer User s Guide*.

- **Interpreter:**

  Enter the name of the interpreter with which the application executes. Application files (`*.vex`) are interpreted files. They cannot run by themselves. They have to be run by an interpreter. Typically, `vengine` is the name of the interpreter that runs the application. This option allows you to specify the interpreter that runs the application. It may be `vengine` or it can be another interpreter, that you specify. (Default is `vengine`)

- **Environment:**

  The Environment option allows you to modify the environment variables in effect when the application executes.

  Typically, applications inherit the set of environment variables that are defined by

SRP. This option allows you to modify those environment variables. You can define an environment variable with a value to append, prepend, or overwrite SRP's value for that variable. If the variable is not defined in SRP's run-time environment, then it is added to the run-time environment for the application being configured.

The set of environment variables is saved, along with all other options, in the application's configuration file (`*.acfg`). Environment variables and their actions are set at run-time in the order in which they are listed in the Environment scrolling window.

You must specify the name of the variable, the value by which the variable is modified, and the action associated with the modifier (append, prepend, overwrite).

- Action:

  Select from Append, Prepend, Overwrite. This action allows you to modify the variable that you specify. It determines the relationship between the variable and modifier, which you specify at the following two prompts (Variable Name and Value). (Default is Append)

- Variable Name:

  Type the name of the variable to add to the list.

- Value:

  Type the environment modifier. This value either appends, prepends, or overwrites the variable specified at the previous prompt (Variable Name) based on the Action you select.

- Apply:

  Select Apply to add the modified environment variable to the Environment scrolling window. No action is taken until you select Apply.

- To Remove environment variables from the scrolling list, press Edit and select Remove. Choose between Selected or All.
  - Selected: All environment variables that are selected are removed from the scrolling window.
  - All: All environment variables that are listed in the scrolling window are removed from the window.

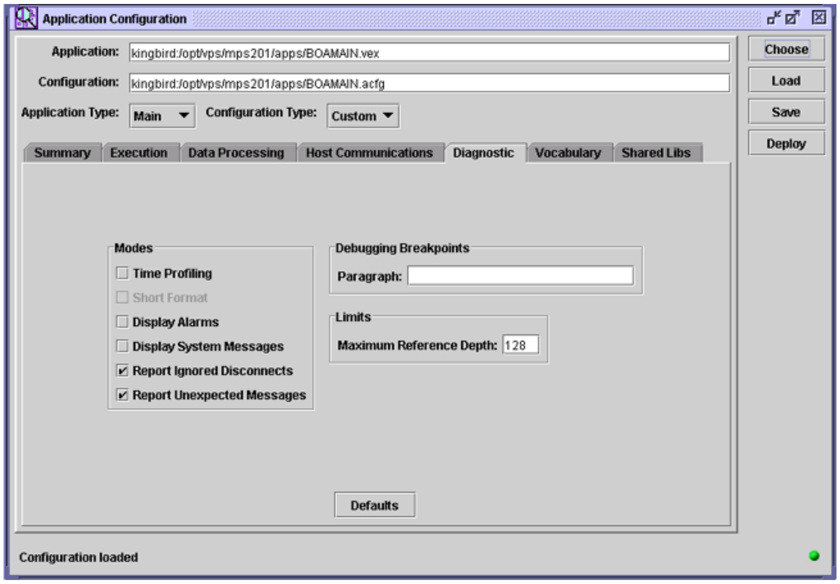
Once you have defined all execution options for this application, you can select Defaults to set the parameters back to their default values.

When you have defined all options, you must select Save in the Configure Application window to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved.

For additional information, see ***Save*** on page 72.

### Diagnostic Options

Use the Diagnostics category of configuration options to designate internal message reporting functions and source code debugging operations. Diagnostic options are categorized as Modes, Limits, and Debugging Breakpoints.



Application Configuration

Application: kingbird:/opt/vps/mps201/apps/BOAMAIN.vex

Configuration: kingbird:/opt/vps/mps201/apps/BOAMAIN.acfg

Application Type: Main

Configuration Type: Custom

Modes

- □ Time Profiling
- □ Short Format
- □ Display Alarms
- □ Display System Messages
- ☑ Report Ignored Disconnects
- ☑ Report Unexpected Messages

Debugging Breakpoints

Paragraph:

Limits

Maximum Reference Depth: 128

Configuration loaded

**To configure Diagnostic Options, define the following parameters.**

- **Modes:**

  This group of options apply to diagnostic modes and include: Report Ignored Disconnects, Report Unexpected Messages, Display System Messages, Time Profiling, Display Alarms, and Short Format.

- **Report Ignored Disconnects:**

  You can ignore or report Ignored disconnects during debugging.

  ☑ Enable the reporting of ignored disconnects. (Default).

  □ Disable the reporting of ignored disconnects.

- **Report Unexpected Messages:**

  You can ignore or report unexpected internal messages during debugging.

  ☑ Enable the reporting of unexpected messages. (Default).

  □ Disable the reporting of unexpected messages.

- **Time Profiling:**

  You can collect execution timing information for paragraphs within an application, when the paragraphs have executed.

  □ Disable collection of execution timing information. (Default).

  ☑ Enable collection of execution timing information.

- **Display Alarms:**

  During an application's execution, messages generated by the application regarding status/exception conditions can display as alarms. These messages can be helpful during application development.

  □ Disable Display of Alarms.

  No alarms display for status or exception conditions generated by an application, including those not handled by the application's `HANDLE CONDITION` or `IGNORE CONDITION` statements. These are either handled or ignored by `HANDLE CONDITION` or `IGNORE CONDITION` statements in the applications or by Handle blocks in PeriProducer applications. (Default)

  ☑ Enable Display of Alarms.

  Enables the display alarms for all status or exception conditions generated by an application, including those handled by the application's `HANDLE CONDITION` or `IGNORE CONDITION` statements.

- **Display System Messages**:

  You can ignore or display input and output debugging messages during an application’s execution cycle. If you select to display messages, the you can specify the format of these messages at the following prompt (Short Format). If you select not to display these messages, the Short Format prompt is inactive.

  □ Disable display of debugging (input & output) messages. (Default).

  ☑ Enable display of debugging (input & output) messages.

- **Short Format**:

  This option is active only if you enable the display of system messages at the previous prompt (Display System Messages). System messages can display as either full text or abbreviated messages (short format).

  □ Disable short message format. The full text of debugging messages displays. (Default).

  ☑ Enable short message format. An abbreviated version of the full text debugging message displays.

- **Limits:**
  - **Maximum Reference Depth (Perform Statement Nesting):**

    This parameter applies to debugging operations only and does not affect an application’s performance. Use this parameter to define the number of traceable levels of source code debugging. If this level is exceeded, the application’s performance is not be affected, but the list of debugging statements will be incomplete. Enter an integer that represents the maximum number of traceable debugging levels. (Default is 128)
- **Debugging Breakpoints:**
  - **Paragraph:**

    This value defines the first debugging breakpoint in the application’s source code. The system default is no breakpoint. Enter the Paragraph Name or Number that serves as the initial debugging breakpoint. All subsequent debugging commands are entered interactively.

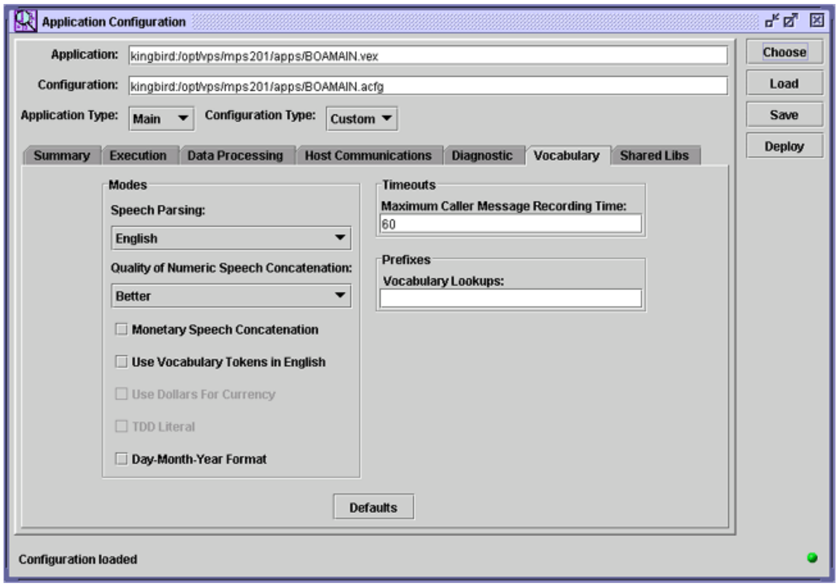
Once you have defined all diagnostic options for this application, you can select Defaults to set the parameters back to their default values.

When you have defined all options, you must select Save in the Configure Application window to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved.

For additional information, see ***Save*** on page 72.

### Vocabulary Options

Use the Vocabulary category of configuration options to define vocabulary and speech specific parameters. Vocabulary options are categorized as Vocabulary Option Modes, Timeouts, and Prefixes.



Application: kingbird:/opt/vps/mps201/apps/BOAMAIN.vex

Configuration: kingbird:/opt/vps/mps201/apps/BOAMAIN.acfg

Application Type: Main

Configuration Type: Custom

Speech Parsing: English

Quality of Numeric Speech Concatenation: Better

□ Monetary Speech Concatenation

□ Use Vocabulary Tokens in English

□ Use Dollars For Currency

□ TDD Literal

□ Day-Month-Year Format

Maximum Caller Message Recording Time: 60

Vocabulary Lookups:

Configuration loaded ●

**To configure Vocabulary Options, define the following parameters.**

- **Modes:**

  This group of options apply to vocabulary modes and include: Monetary Speech Concatenation, Use Vocabulary Tokens in English, Use Dollars For Currency, TDD Literal, Day-Month_Year Format, Quality of Numeric Speech Concatenation, and Speech Parsing.

  - **Monetary Speech Concatenation:**

  Use this parameter to designate the method of concatenating monetary speech output at run-time. Your selection should correspond to the size of the vocabulary that the application accesses. Typically, Monetary Speech Concatenation requires a larger vocabulary.

    For example, $25 can be spoken as a single element “twenty-five dollars” or as two elements “twenty-five” “dollars.” The phrase “twenty-five dollars” requires a larger vocabulary that “twenty-five” “dollars.”

Regardless of the number of phrases by which the dollar value is spoken, numeric items are spoken in the formatted mode defined either by the PeriProducer data card type, which is specified in the application. Both sign and decimal place are represented.

□ Disable Monetary Speech Concatenation.

Example: $25 is spoken as the two elements “twenty-five” “dollars.” (Default)

☑ Enable Monetary Speech Concatenation.

Example: $25 is spoken as the single element “twenty-five dollars.” This requires a larger vocabulary than is needed if this parameter is disabled.

- **Quality of Numeric Speech Concatenation:**

  Define the quality of numeric speech output at run-time by selecting Regular, Better, or Best.

  Regular: Enables the Regular method for concatenating speech output at run-time. This represents the most minimal quality available for numeric speech output.

  Better: Enables the Better method for concatenating speech output at run-time. (Default)

  Best: Enables the Best method for concatenating speech output at run-time. This represents the highest quality available for numeric speech output.

- **Speech Parsing:**

  Indicate the Method of Speech Parsing when speaking numeric amounts, dates, and time information. Select from Arabic, British, Cantonese, Dutch, English, European, French, German, Italian, Japanese, Korean, Mandarin, Portuguese, Spanish, and TDD (Telecommunications Device for the Deaf). (Default is English)

- **Use Vocabulary Tokens in English:**

  This parameter is active only when Dutch, French, German, Italian, Portuguese, or Spanish is selected at the previous prompt (Method of Speech Parsing). You can display these vocabulary tokens in either the language you select or in English. This parameter does not affect the language that is spoken by the token; it affects only the language in which the token displays.

□ Disable Using English Vocabulary Tokens.

When you select either Dutch, French, German, Italian, Portuguese, or Spanish, vocabulary tokens display in the language you select. (Default)

Spanish Example: Token=uno; Spoken=uno

☑ Enable Using English Vocabulary Tokens.

When you select either Dutch, French, German, Italian, Portuguese, or Spanish, vocabulary tokens display in English.

Spanish Example: Token=one; Spoken=uno

For additional information about using tokens when recording and naming vocabulary elements, refer to the *PeriStudio User s Guide*. The terms “token” and “label” can be used interchangeably when working with that document.

- **TDD Literal:**

  This parameter determines the method by which messages are displayed to a caller’s TDD (Telecommunications Device for the Deaf) device during an application’s execution cycle. It is applicable only when configuring an application for TDD and can only be defined when TDD is selected at the previous prompt (Method of Speech Parsing).

  TDD transactions are accomplished using message text as opposed to spoken vocabulary. This parameter determines whether the literal message or a referenced value displays on the caller’s device. Enable or disable the TDD Literal by specifying OFF or ON.

  ☑ Enable the TDD Literal method.

  The literal message displays on a caller’s TDD a opposed to a referenced value. (Default)

  □ Disable the TDD Literal method.

  A referenced value of the text displays on a caller’s TDD as opposed to the literal message text.

- **Day-Month-Year Format:**

  This parameter determines the display format for dates (day-month-year or month-day-year). You can specify the date format only when British or

English is selected at the previous prompt (Method of Speech Parsing).

□ Disable Day-Month-Year format.

Dates display in month-day-year format (Example: 12/31/98). (Default for English)

☑ Enable Day-Month-Year format.

Dates display in day-month-year format (Example: 31/12/98). (Default for British)

- **Timeouts:**
  - **Maximum Caller Message Recording Time:**

    This parameter sets the maximum Caller Message Recording (CMR) to a specified number of seconds. Enter the maximum length of recording time in number of seconds. (Default is 60 seconds)
- **Prefixes:**

  Prefixes apply to the use of vocabulary elements. For additional information about using prefixes when recording and naming vocabulary elements, refer to the *PeriStudio User s Guide*. The terms “token” and “label” can be used interchangeably when working with that document.
  - **Vocabulary Lookups:**

    Enter the prefix to be used for vocabulary lookups at run-time. The default is no prefix. This option is intended for use with multilingual vocabularies. It specifies the language in which a particular vocabulary item is to be spoken at run-time.

☞ Once you have defined all vocabulary options for this application, you can select Defaults to set the parameters back to their default values.

☞ When configuration of all categories of options is complete, you must select Save in the Configure Application window to save edits to the file. The symbol changes color from **red** to **green**, when all applied edits have been saved.

For additional information, see ***Save*** on page 72.

## Configure VoiceXML Applications

VoiceXML applications can reside on separate systems and are accessed through Uniform Resource Indicators (URIs), like web pages on the Internet. Only the configuration file (.acfg) is defined and kept on an MPS node. Once a VoiceXML application configuration file is defined and saved, the application can be assigned, started, etc. like standard PeriProducer applications.

### Identify the Application to Configure

You can load a VoiceXML file using PeriView in the following ways:

- Specify the file location of the vxml file, or
- Specify the URI of the vxml application

In the `Application` field of the Application Configuration window, specify either the location of the file or the URI of the VoiceXML application.

For example,

Specify the location of the file as follows:

Application: file:///home/peri/CorpDialer/corpdialer.vxml

Or, specify the URI of the vxml application, as follows:

Application: http://vxml_server/apps/corpdialer.vxml

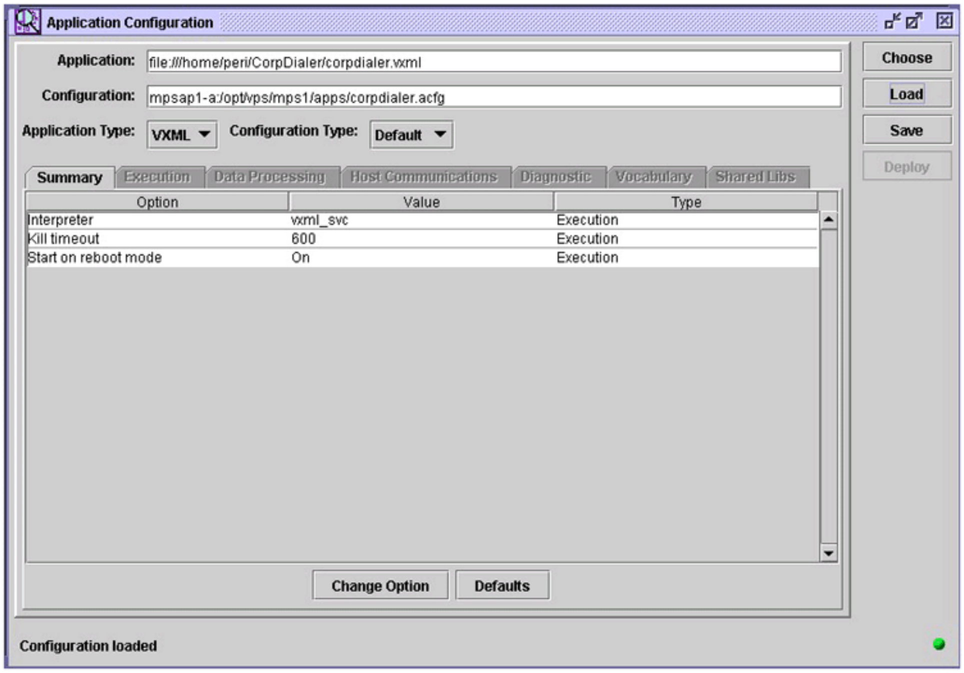
Application Configuration does not verify that the URI is valid (i.e., a VoiceXML application exists at the specified location). Be sure you enter the valid URI for the application.

In the `Configuration` field, enter the location for the configuration file in the following manner, *nodename*:/*directory*/*filename*`.acfg.` The directory should typically be `/opt/vps/`*componentX*`/apps/`*appname*.`acfg`. You should use the same root name for the configuration file as you do for the VoiceXML application.

For example:

Configuration: mpsap1-a:/opt/vps/mps1/apps/corpdialer.acfg

After entering the criteria, click on Load. PeriView creates a default configuration for the VoiceXML application. Note that the application type automatically changes to VoiceXML.



Application: file:///home/peri/CorpDialer/corpdialer.vxml

Configuration: mpsap1-a:/opt/vps/mps1/apps/corpdialer.acfg

Application Type: VXML

Configuration Type: Default

| Option | Value | Type |
|---|---|---|
| Interpreter | vxml_svc | Execution |
| Kill timeout | 600 | Execution |
| Start on reboot mode | On | Execution |

Configuration loaded

### Define Custom Configurations

VoiceXML applications can only be Call Processing applications. See “Execution Type:” on page 85.

Only the Start on Reboot (page 88) and Kill (page 93) timer execution options are available for VoiceXML applications. All other options are unavailable (and greyed out in the configuration windows).

### Save the Configuration

Click on the Save button to save the configuration file. The configuration file can then be accessed the same way as any other PeriProducer application configuration file.

### Deploy the Application

Click on the Deploy button to start the Application Management window. The VoiceXML application can now be handled as a standard call processing application.

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4

# Application Manager

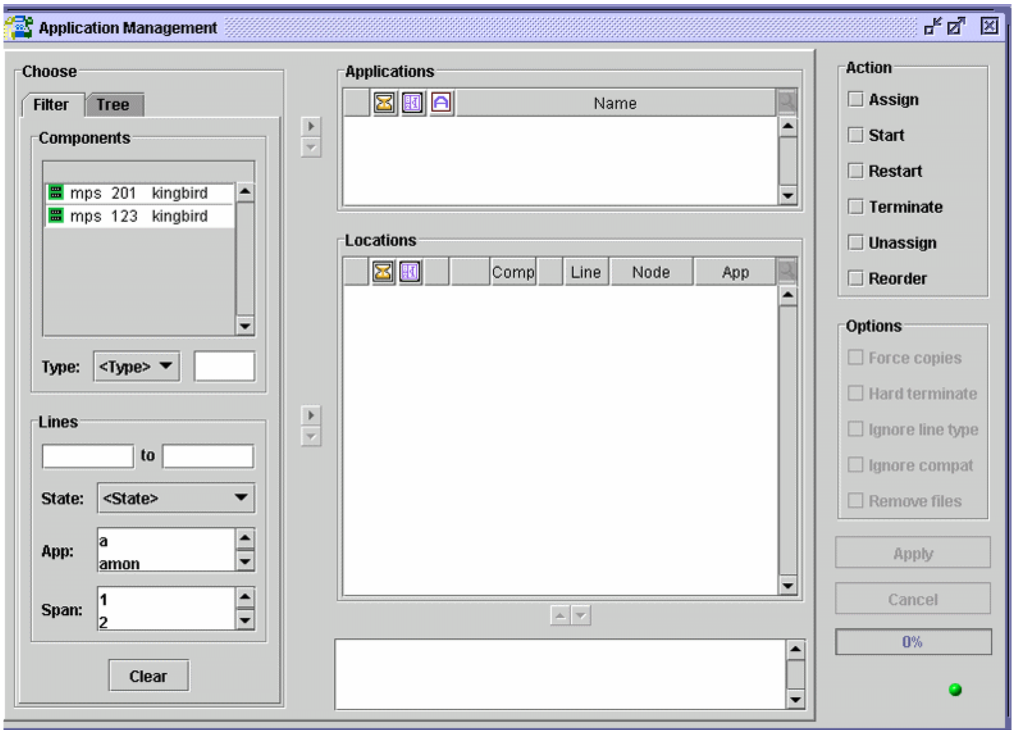
**This chapter covers:**

1. **Launching the Application Management Plug-in**
2. **Introduction to Application Management**
3. **Application Management Actions**
4. **Application Management Options**
5. **Application Management Event Cycle**

## Launching the Application Management Plug-in

To launch the Application Management plug-in, open the PeriView GUI Main Screen as shown in Introduction to PeriView  on page 2. Click on the Application Management icon as displayed below.

The Application Management screen appears as follows:



mps 201 kingbird
mps 123 kingbird

App: a
amon

Span: 1
2

## Introduction to Application Management

The APPMAN tool is the PeriView tool that is used to manage applications in the network. Tree objects depict their state (**up**, **down**, **unreachable**), in near real-time, by the color (**green**, **red**, **black**) of individual objects. You can assign applications from the Application Management window.

When you launch the Application Management window, the applications that are currently assigned to the domain displayed in the workspace are listed in the Applications scrolling window. If you choose the action from a tree object to which applications are assigned, information specific to the object displays in the Locations scrolling window. The Applications, Locations, and Options display areas are inactive until you select an Action.

You can control the order in which applications are assigned by manipulating the Locations list. Applications are assigned in the order in which the selected locations are listed. When you choose this action, the order of the Locations listings, reflects the current default line start order. This information is stored in the `$MPSHOME/component_typeN/etc/aseLines.cfg` file.

When you reorder the list in this window, the new order applies only to the current session. Each time this window is closed and reopened, the listing reflects the default order (specified in the `aseLines.cfg` file), not the order specified in the previous session.

Application files and user shared libraries are copied from their source location to the designated directories, on the node where they will process during the Assign process. Executable files (`*.vex`) and configuration files (`*.acfg`) for all applications (main and linked) are copied to the following locations (on the node where they will process).

Solaris: `$MPSHOME/component_typeN/apps`

Windows 2000:`%MPSHOME%\component_typeN\apps`

User shared libraries (`*.so or *.dll`) will be copied to the following locations:

Solaris: `$MPSHOME/component_typeN/apps/lib`

Windows 2000:`%MPSHOME%\component_typeN\apps\lib`

### Application Configuration

An application's executable and configuration files (`*.vex` and `*.acfg`) are required to exist in the same directory before the application can be assigned to a location. If you select an executable file a corresponding configuration file is not detected, a notice box displays to inform you that a configuration file is created before the assign process continues. Press OK to continue.

- If you selected a PeriProducer application, it is configured using the values specified in the executable file (*.vex) and default values for all options that have not been explicitly specified.
- Use the Terminate or Un-Assign Lines action to un-assign the application.
- Open the Application Configuration window, modify the configuration

file, save the file, and select Assign/Start to assign the application with the configuration you saved.

For additional information, see ***Application Configuration*** on page 63.

### Enter Locations Information

You must select the locations to be assigned in the Locations scrolling window. The Assign action is not applied to locations that are listed, but not selected. Any location listed in the scrolling window can be selected, deselected, or removed from the display.

When you select a main application in the Applications scrolling window, you can select phone lines in the Locations scrolling window. When you select a linked application, you can select only components, not phone lines.

**To Add Locations to the Locations Window**

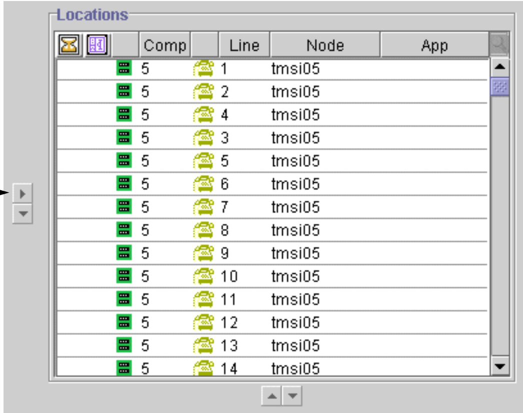
- **Select/deselect any item in the Choose window, either from the Filter or Tree tab.**
  - If choosing from the Filter tab:

    To select more that one item, hold the CTRL key while clicking.

    To select a series of items, hold the SHIFT key while clicking.
  - If choosing from the Tree tab:

    To select more that one item, hold the CTRL key while clicking.

    Holding the SHIFT key under this tab does not allow multiple selections.
- **To add locations, click the right arrow to the right of the Choose window.**

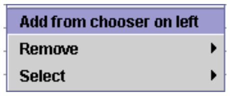


Click to add

Locations

| Comp | Line | Node | App |
|---|---|---|---|
| 5 | 1 | tmsi05 | |
| 5 | 2 | tmsi05 | |
| 5 | 4 | tmsi05 | |
| 5 | 3 | tmsi05 | |
| 5 | 5 | tmsi05 | |
| 5 | 6 | tmsi05 | |
| 5 | 7 | tmsi05 | |
| 5 | 8 | tmsi05 | |
| 5 | 9 | tmsi05 | |
| 5 | 10 | tmsi05 | |
| 5 | 11 | tmsi05 | |
| 5 | 12 | tmsi05 | |
| 5 | 13 | tmsi05 | |
| 5 | 14 | tmsi05 | |

You can also make use of the background menu available in the Applications area to add an application from the Chooser to the Applications list. The background menu is as follows:



**Menu Options:**

Add from chooser on left—This menu option adds the location details of the components selected in the chooser on the left side of the Application Management window.

Remove—This menu option removes the location details of the selected component.

Select—This menu option selects either all or none of the locations from the Locations list.

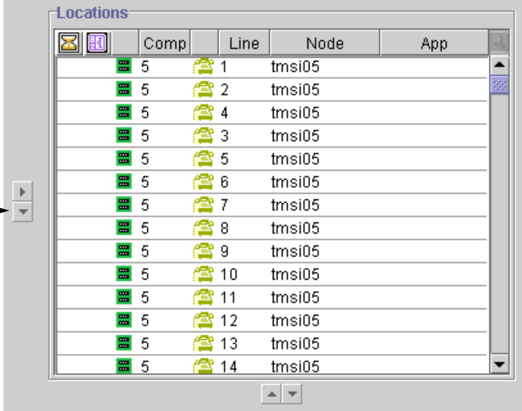
**To Remove Locations from the Locations Window:**

- Select/deselect any item listed in the Locations scrolling window by <LEFT> clicking the location.

  To select more that one item, hold the CTRL key while clicking.

  To select a series of items, hold the SHIFT key while clicking.

- To remove locations, click the DOWN arrow to the left of the Locations scrolling window.



Locations

| Comp | Line | Node | App |
|---|---|---|---|
| 5 | 1 | tmsi05 | |
| 5 | 2 | tmsi05 | |
| 5 | 4 | tmsi05 | |
| 5 | 3 | tmsi05 | |
| 5 | 5 | tmsi05 | |
| 5 | 6 | tmsi05 | |
| 5 | 7 | tmsi05 | |
| 5 | 8 | tmsi05 | |
| 5 | 9 | tmsi05 | |
| 5 | 10 | tmsi05 | |
| 5 | 11 | tmsi05 | |
| 5 | 12 | tmsi05 | |
| 5 | 13 | tmsi05 | |
| 5 | 14 | tmsi05 | |

Click to remove

## Designate the Assign, Start and Restart Order

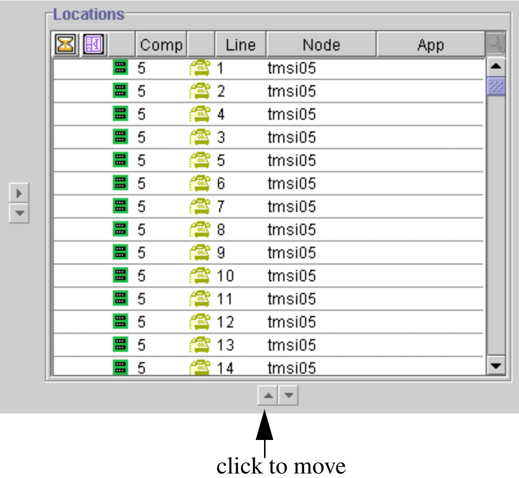
Applications are assigned/started/restarted, sequentially, in the order in which selected locations are listed. You can reorder the list to control the assign/start order for the current session.

- Select/deselect any item listed in the Locations scrolling window by <LEFT> clicking the location.

  To select more that one item, hold the CTRL key while clicking.

  To select a series of items, hold the SHIFT key while clicking.

- To move locations either up or down, click the UP or DOWN arrow below the Locations scrolling window.



| Comp | Line | Node | App |
|---|---|---|---|
| 5 | 1 | tmsi05 | |
| 5 | 2 | tmsi05 | |
| 5 | 4 | tmsi05 | |
| 5 | 3 | tmsi05 | |
| 5 | 5 | tmsi05 | |
| 5 | 6 | tmsi05 | |
| 5 | 7 | tmsi05 | |
| 5 | 8 | tmsi05 | |
| 5 | 9 | tmsi05 | |
| 5 | 10 | tmsi05 | |
| 5 | 11 | tmsi05 | |
| 5 | 12 | tmsi05 | |
| 5 | 13 | tmsi05 | |
| 5 | 14 | tmsi05 | |

click to move

Phone lines are assigned, started, or restarted, sequentially, in the order in which selected locations are listed in the Locations scrolling window. You can reorder this list using the up and down arrows. However, the order you define from within this window applies to the current session only.

## Enter Applications Information

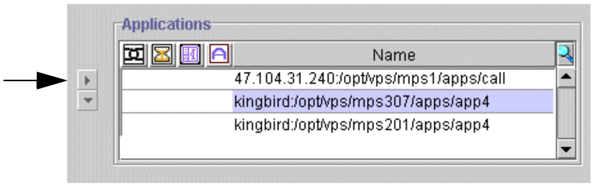
You must identify the application that is to be assigned. You can select either one main application or one or more linked applications.

If you do not select an application, the Assign action is not applied. Any application listed in the scrolling window can be selected, deselected, or removed from the display. You can also add applications to the scrolling window.

**To add applications:**

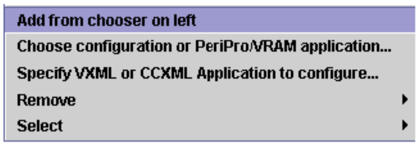
- Select an application from the Chooser of the Application Management window.
- Click the RIGHT arrow to the left of the Application scrolling window.

Click to add



| Name |
|---|
| 47.104.31.240:/opt/vps/mps1/apps/call |
| kingbird:/opt/vps/mps307/apps/app4 |
| kingbird:/opt/vps/mps201/apps/app4 |

You can also make use of the background menu available in the Applications area to add an application from the Chooser to the Applications list. The background menu is as follows:


Add from chooser on left
Choose configuration or PeriPro/VRAM application...
Specify VXML or CCXML Application to configure...
Remove
Select

**Menu Options:**

Add from Chooser on left—Once you have selected the components from the Chooser, selecting the `Add from Chooser on left` background menu option, adds the applications selected in the chooser to the Applications list.

Choose Configuration or PeriPro application—This menu option opens the `Choose Application` window for the selected application.

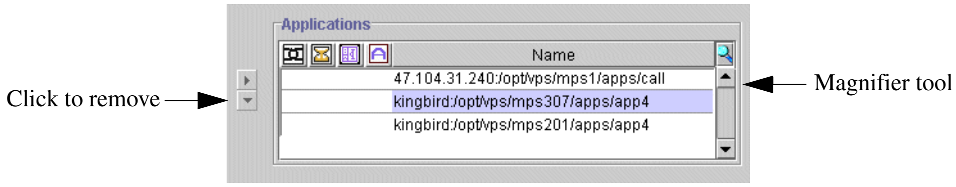
Specify VXML Application to configure—This menu option opens the `Application Configuration` window for the selected application.

Remove—This menu option removes either all or the selected application from the application list.

Select—This menu option selects all or none of the applications in the application list.

**To remove applications:**

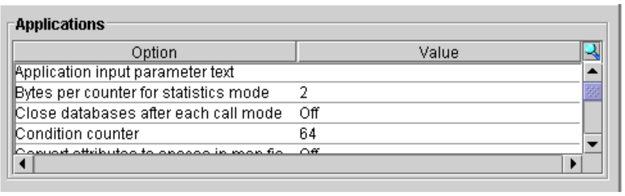
- Select/deselect an item listed in the Applications scrolling window by <LEFT> clicking the name of the application.
- Click the DOWN arrow to the left of the Application scrolling window.



| Name |
|---|
| 47.104.31.240:/opt/vps/mps1/apps/call |
| kingbird:/opt/vps/mps307/apps/app4 |
| kingbird:/opt/vps/mps201/apps/app4 |

**Magnifier Tool**

The Magnifier tool allows you to view the configurations for the selected application. After you select an application and click on the magnifier tool, the configuration parameters corresponding to that application are displayed in the `Applications` display area as shown below:



| Option | Value |
|---|---|
| Application input parameter text | |
| Bytes per counter for statistics mode | 2 |
| Close databases after each call mode | Off |
| Condition counter | 64 |

## Define the Termination Type

Termination type allows for either the abrupt (hard) or delayed (soft) termination of a call in progress when an application is to be terminated.

When applications are terminated abruptly, any calls that are processing are cut off. Alternatively, you can delay termination until either the currently processing call completes its execution cycle or the kill timer limit has expired (whichever comes first).

**To define Termination Type:**

When an application may need to be terminated, you can select the termination type. Soft Terminate is the default. To select Hard Terminate, check the box in the Options field.

Select or Soft or Hard Terminate. (Default is Soft.)

- Soft

  The call in progress (if any) is allowed continue up to the value defined for the kill timer. The call either terminates naturally within this period or the application terminates the call when the Kill Timer value expires.

- Hard

  The call in progress is terminated abruptly (not allowed to follow through to completion) before terminating the application.

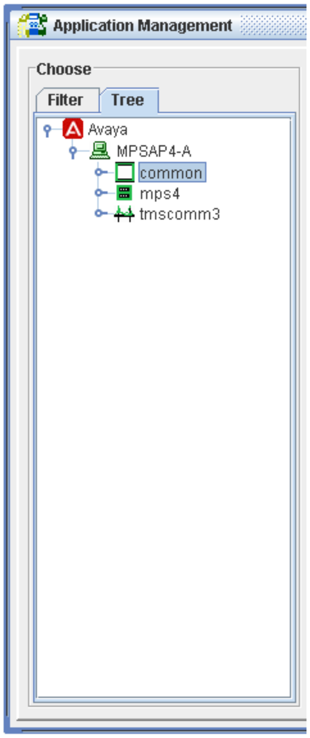
## Expand and Collapse the Tree

A tree is a graphical representation of the network. It can represent either the default or user defined view of the entire network.

Network entities display as objects on the tree in the workspace. When you display tree objects, you can use them to launch the subset of Application Manager tools. You can initiate activity from objects at any hierarchical level of the tree. Multi-selected objects are manipulated simultaneously.

You can expand user defined domains by lines, nodes, components, and application. You can only expand the system defined default domain by nodes, components, and applications.

Expanding a tree places control of network activity at the tree object level. The tree displays objects, their names, their hierarchical relationships, and application specific information. Additionally, the color of tree objects (except for applications) show the state of component's processes.



For a summary of tree object information, see ***Tree Object Information*** on page 116.

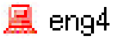
## Tree Object Information

Tree object information is displayed with text, by object shape, and by color. The information displayed by a tree object is directly related to the entity from which it was expanded. Objects representing network entities include node, component, application, and line objects.

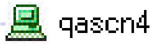
### Tree Object Information Sheet 1 of 2

**Node** objects are identified by their name, which displays below the object. Each node represents a unique Solaris machine defined for the network.

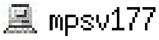
The color of a node indicates the status of its components and srp.



- A **red** node indicates that at least one of its components is **Down**, as indicated by an SRP state of anything other than Running. It indicates either of the following:
  - One or more components configured on the node are down. (When you expand the node by component, one or more components on the node are represented by **red** objects)



- A **green** node indicates that all of its components are **Up**, as indicated by an SRP state of Running. It indicates both of the following:
  - All components configured on the node are up and running. (When you expand the node by component, all components on the node are represented by **green** objects.)



- A **black** node indicates that the state of the node is unknown. No information is available because the node is Unreachable. Once information is available the state of the node is either **Down** or **Up**.

  A node is considered **Unreachable** when the node itself is unreachable.

**Tree Object Information Sheet 2 of 2**

mps1

**Component** objects display their node name, the MPS component number, and the number of phone lines to which applications have been assigned.

Each component represents an entity that is configured with phone lines and is capable of both application processing and execution.

The color of a component object indicates its status.

- A **red** component indicates that the component is **Down**, as indicated by an SRP state of anything other than Running. It indicates that one or more component-specific processes have either been interrupted or are not yet fully operational.
- A **green** component indicates that the component is **Up**, as indicated by an SRP state of Running. It indicates that all component-specific processes are fully operational.
- A **black** component indicates that the state of the component is unknown. No information is available and the state of the component is **Unreachable**. Once information is available, the state of the component is either **Down** or **Up**.

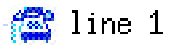
While a component is in the process of booting, and not all processes are yet fully operational, the component displays as a **red** object. However, once the component is **Up**, the component object becomes **green**, indicating that all processes are fully operational.

For additional information about tree object states, see ***Tree Object Information*** on page 116.

tdvx

**Application** objects represent the applications that are assigned to locations.

- The Application object displays the application name


line 1

Line objects represent the phone line that are associated with the application.

## Types of Applications

The network requires a variety of applications to support call processing applications. The application itself, plus its configuration parameters, determine the role an application plays in this process. Although some configuration parameters can be defined within an application's executable file (`*.vex`), each executable file is associated with a configuration file (`*.acfg`), which defines configuration parameters.

**Initially, an application is configured as either Main, Linked or VXML.**

| Application Type | Description |
|---|---|
| Main | • Copied to the component, assigned to lines, and performs specific call processing or administrative functions.<br>• Can link to other applications for interim processing functions.<br>• Defined by Execution Type and other configuration parameters. |
| Linked | • Copied to the component, but not assigned to phone lines, and performs interim functions that can be shared among main applications.<br>• Must be assigned to the component before the main application(s), which links to it, begins to execute. Files must remain on the component until the last occurrence of a main application, that links to it, is un-assigned.<br>• Identified by the link icon that displays alongside the application's name in APPMAN windows (when applicable).<br>• No additional configuration options apply. |
| VXML<br>V | • Copied to the component, assigned to lines, and performs specific call processing or administrative functions.<br>• Can link to other applications for interim processing functions.<br>• Defined by Execution Type and other configuration parameters. |

**Main applications are configured as either Call Processing or Administrative.**

| Execution Type | Description |
|---|---|
| Call Processing | Main applications, which perform call processing functions. |
| Administrative | • Main applications, which perform system maintenance functions and act to support call processing applications.<br>• Can be configured as initialization applications. |
| Initialization<br>⌛ | • Main, administrative applications that perform initialization functions, some of which can be prerequisite to other application processing.<br>• Assigned and execute completely before other applications are assigned. (Only executes once)<br>• Identified by the initialization icon that displays alongside the application's name in Application Manager windows. |

**Main applications are defined as Start on Reboot or No Start on Reboot.**

| No Start on Reboot | Description |
|---|---|
| ▣ | Main applications identified with the **blue** No Start icon have been configured not to start (restart) during system reboot. |

## Types of Phone Lines

The MPS's phone lines are categorized as either call processing lines or administrative lines. Call processing lines represent physical lines, which are capable of processing telephone calls. Administrative lines represent logical lines, which are incapable of processing calls.

Line type checking is enabled, by default, in the Assign/(Re)Start Lines tool. This ensures that you know the type of line to which you are assigning an application.

Phone lines are represented by icons in the AssignLines, Start Lines, Restart Lines Terminate Lines, Unassign Lines actions, and Status tools. The icon's shape and color indicate information about the phone line.

The shape of phone line icons indicates phone line type (Call Processing or Administrative). The color of phone line icons (**blue**, **green** or **yellow**) indicates the state of the phone line (assigned, assigned and running, or un-assigned).

Phone line icon shape and color information is summarized on the following tables.

| Shape | Description |
|---|---|
| ☎ | Call Processing (Physical) Line; capable of processing calls.<br>Assign call processing applications to call processing lines. |
| A | Administrative (Logical) Line; incapable of processing calls.<br>Assign administrative applications to administrative lines. |

| Color | Description |
|---|---|
| **Green** | An application is assigned to a phone line and is in the process of executing (running). |
| **Blue** | An application was assigned to a phone line but it is not currently executing (not running). The application:<br>• was assigned but not started,<br>• has completed its execution cycle, or<br>• has terminated but has not been un-assigned from the phone line. |
| **Yellow** | The phone line has been selected, but no application has been assigned to the phone line. |

## File Location Requirements

All files that an application requires during its execution cycle are copied from their source location to specific locations on the components with the Assign action. Required files include executable and configuration files for both main and linked applications and any shared libraries they can utilize.

- Main and linked application executable (`*.vex`) and configuration (`*.acfg`) files are copied to the following locations (on the node where they will process).

  Solaris:`$MPSHOME/component_typeN/apps`

  Windows 2000:`%MPSHOME%\component_typeN\apps`

- User shared libraries (`*.so or *.dll`) are copied to the following locations on the node where the main and linked applications with which they are associated will process.

  Solaris:`$MPSHOME/component_typeN/apps/lib`

  Windows 2000:`%MPSHOME%\component_typeN\apps\lib`

Only one copy of an application will reside on a component regardless of the number of application instances that are processing on the node.

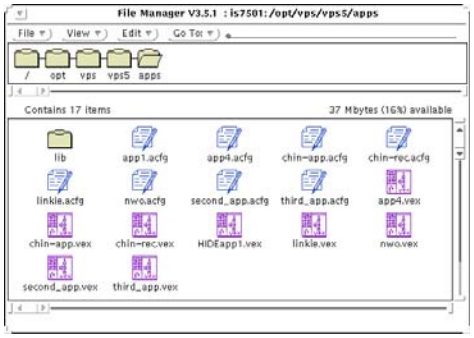
- Only one copy of each of the files (`*.vex`,`*.acfg`, `*.so`, `*.dll`) a main application requires, must reside on the component where it is processed, regardless of the number of phone lines to which it is assigned.
- Only one copy of each of the files (`*.vex`,`*.acfg`, `*.so, *.dll`) a linked application requires, must reside the on the component where processing occurs for the main applications that link to it.

Further, you must assign linked and initialization applications to the component where process occurs before starting main applications that depend on these files during their execution cycle.

Application files (`*.vex`,`*.acfg`, `*.so, *.dll`) need to remain on the component where processing occurs until the last instance of the application is un-assigned from its location. You disassociate files from phone lines with the Terminate/Un-Assign Lines tool during the Un-Assign process. Linked applications should only be removed when the last occurrence of all main applications linking to them are un-assigned.

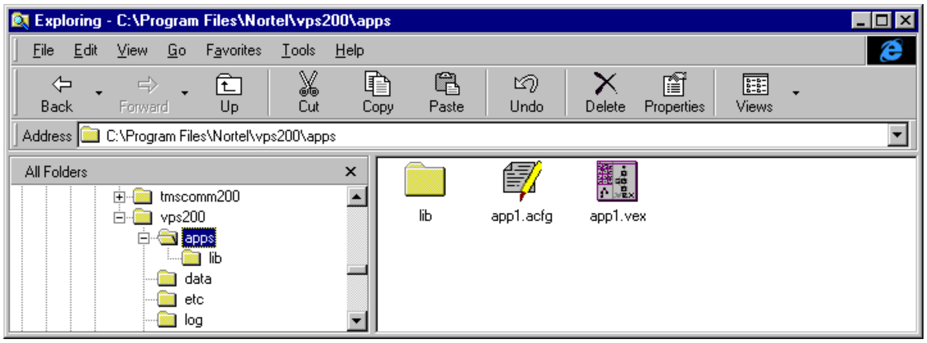
### Solaris File Manager

The applications in this example (`*.vex` and `*.acfg`) have already been assigned to the MPS and reside in the directory `$MPSHOME/vps5/apps`. Notice the `lib` file folder, in which user shared libraries are located, is a subdirectory of `/apps`.



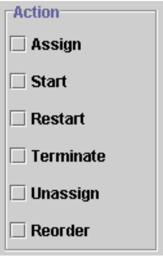
### Windows File Manager

The applications in this example (`*.vex` & `*.acfg`) have already been assigned to the MPS and reside in the directory `%MPSHOME%\vps204\apps`. Notice the `lib` file folder, in which user shared libraries are located, is a subdirectory of `\apps`.



## Application Management Actions

Application Management Actions include associating applications with locations (components and phone lines) and initiating an application's execution cycle; terminating applications and disassociating them from locations; configuring execution parameters and run-time environment, accessing component and application status information; defining the default line start order during reboot; and file maintenance.



Application Management Actions include Assign, Start, Restart, Terminate, Unassign and Reorder.

**Assign***:* The Assign process copies applications to the component where they are processed and associates applications with specific MPS phone lines.

Only one application can be assigned per phone line.

**Start***:* The Start process initiates the application's execution cycle on the phone lines to which it is assigned.

**Restart***:* The Restart process terminates an application during its execution cycle, then restarts the applications on the same phone line.

**Terminate***:* The Terminate process halts an application's execution cycle.

**Unassign***:* The Unassign process disassociates applications from the components where they are processing and from the phone lines where they were assigned to execute.

**Reorder**: The Reorder Action is used to redefine the order in which applications are assigned to a location and started (when applicable) when the system reboots.

The default order is the order which applications are initially assigned.

## Assign Action

Use the Assign Lines action to associate applications with locations and to initiate an application’s execution cycle.

You can assign an application without starting it, assign and start the application simultaneously, or terminate, then restart, applications at the same location to which it was previously assigned. The tree in the workspace indicates the most current information about the domain.

### Assign/Start Order

Applications are copied to the appropriate directory and associated with locations during the Assign process. The Start process initiates an application’s execution cycle. The order in which applications are assigned and started is critical to overall system performance. The assign/start order is initially defined when you assign and start applications with the Assign/(Re)Start Lines tool. However, the order can be redefined with the Line Start Order During Reboot tool.

### Configuration File Requirements

Before an application can be assigned, a configuration file (`*.acfg`) must exist in the same directory as its executable file (`*.vex`). If you attempt to assign an application and a configuration file is not present, a default configuration file is automatically created during the Assign process.

For additional information, see ***Application Configuration*** on page 63.

### Assign Lines Window Icons

The graphical application and phone line information in the Assign Lines action windows, is identified in the following table.

For information about types of applications, see ***Types of Applications*** on page 118.

For information about configuring application types, see ***Configure Standard Applications*** on page 66.

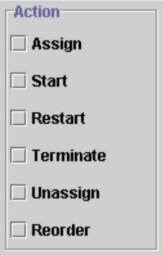
For information about types of phone lines, see ***Types of Phone Lines*** on page 119.

| Icon | Type | |
|---|---|---|
| ▣ | Application | Linked |
| ⌛ | | Initialization |
| ▥ | | No Restart During Reboot |
| A | | Administrative |
| 🟩 | Component<br>(**Green**, **Red**, **Black**) | MPS |
| ☎ | Phone Line<br>(**Green**, **Blue**, **Yellow**) | Call Processing (Physical) Line |
| A | | Administrative (Logical) Line |

### Start the Assign Lines Action

Regardless of the method you use to launch the Assign Lines action.

- Designate and expand a domain (if applicable).
- Initiate the Assign Lines action by clicking the checkbox next to it.

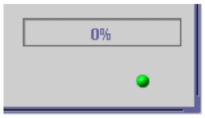

Action
☐ Assign
☐ Start
☐ Restart
☐ Terminate
☐ Unassign
☐ Reorder

When you launch the Assign Lines action from a selected tree object, it displays with predefined application and locations information.

An application can execute in either IVR mode (voice) or Web mode (Internet), depending upon the configuration parameters associated with the application.

### Assign Lines Progress

The rate at which applications are assigned displays to the screen in the form of a Progress Bar in the lower right-hand corner of the Application Management window.



As the indicator bar progresses from 0–100%, the name of the application and the location to which it is being assigned, started, or restarted displays in the window.

The Assign Lines process can be halted by selecting Cancel.

## Start and Restart Action

Use the Start and Restart Lines actions to initiate an application's execution cycle.

You can assign an application without starting it, assign and start the application simultaneously, or terminate, then restart, applications at the same location to which it was previously assigned. The tree in the workspace indicates the most current information about the domain.

### Start/Restart Order

Applications are copied to the appropriate directory and associated with locations during the Assign process. The Start process initiates an application's execution cycle. The order in which applications are assigned and started is critical to overall system performance. The assign/start order is initially defined when you assign and start applications with the Assign/(Re)Start Lines tool. However, the order can be redefined with the Line Start Order During Reboot tool.

For additional information, see ***Application Management Event Cycle*** on page 139.

### Configuration File Requirements

Before an application can be assigned, a configuration file (`*.acfg`) must exist in the same directory as its executable file (`*.vex`). If you attempt to assign an application and a configuration file is not present, a default configuration file is automatically created during the Assign process.

For additional information, see ***Application Configuration*** on page 63.

### Start and Restart Window Icons

The graphical application and phone line information in the Start and Restart Lines action windows, is identified in the following table.

For information about types of applications, see ***Types of Applications*** on page 118.

For information about configuring application types, see ***Application Configuration*** on page 63.

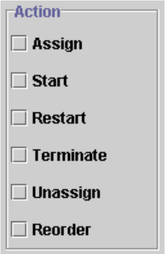
For information about types of phone lines, see ***Types of Phone Lines*** on page 119.

| Icon | Type | |
|---|---|---|
| ⌘ | Application | Linked |
| ⌛ | | Initialization |
| ▦ | | No Restart During Reboot |
| A | | Administrative |
| 🟩 | Component<br>(**Green**, **Red**, **Black**) | MPS |
| ☎ | Phone Line<br>(**Green**, **Blue**, **Yellow**) | Call Processing (Physical) Line |
| A | | Administrative (Logical) Line |

### Start or Restart Lines Action

Regardless of the method you use to launch the Start or Restart Lines action.

- Designate and expand a domain (if applicable).
- Initiate the Start or Restart Lines action by clicking the checkbox next to the appropriate action



Action

□ Assign

□ Start

□ Restart

□ Terminate

□ Unassign

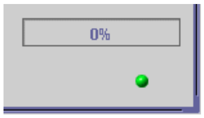
□ Reorder

When you begin the Start or Restart Lines action from a selected tree object, it displays with predefined application and locations information.

An application can execute in either IVR mode (voice) or Web mode (Internet), depending upon the configuration parameters associated with the application.

### Start and Restart Lines Progress

The rate at which applications are started or restarted displays to the screen in the form of a Progress Box.



As the indicator bar progresses from 0–100%, the name of the application and the location to which it is being assigned, started, or restarted displays in the window.

The Start and Restart Lines process can be halted by selecting Cancel.

## Terminate or Unassign Action

Use the Terminate or Unassign Lines action to terminate applications and un-assign them from the locations to which they had been assigned. You can terminate an application without un-assigning it. The tree in the workspace indicates the most current information about the domain.

When applications are assigned, they are associated with the user that launched the Application Manager. Only that user (with the exception of `root`) is able to start, restart, terminate, or un-assign that phone line.

Applications are terminated and unassigned in the order in which selected locations are listed in the Locations scrolling window. The order of the Locations list reflects the default line start order.

If applications have been assigned to locations subsequent to the list being reordered, these applications are appended to the locations list.

### File Maintenance

The Terminate and Unassign Lines actions provide an option for automatically removing executable (`*.vex`), configuration (`*.acfg`) files when the last occurrence of the application is un-assigned from a location. Linked applications and shared libraries cannot be removed with this option because only those applications that are assigned to phone lines display in the window.

During the assign process, application files and user shared libraries are copied from their source location to the designated directories on the node where processing occurs.

- Executable file (`*.vex`) and configuration files (`*.acfg`) for all applications (main and linked) will be copied to the directory the following locations:

Solaris:`$MPSHOME/component_typeN/apps`

Windows 2000:`%MPSHOME%\component_typeN\apps`

- User shared libraries (`*.so or *.dll`) will be copied to the following locations:

  Solaris:`$MPSHOME/component_typeN/apps/lib`

  Windows 2000:`%MPSHOME%\component_typeN\apps\lib`

### Terminate/Unassign Window Icons

Application and phone line information displays graphically with icons in the Application and Locations windows. These icons are identified in the following table.

For information about types of applications, see ***Types of Applications*** on page 118.

For information about types of phone lines, see ***Types of Phone Lines*** on page 119.

For information about configuring application types, see ***Application Configuration*** on page 63.

| Icon | Type | |
|---|---|---|
| ⌛ | Application | Initialization |
| ▦ | | No Restart During Reboot |
| 🟩 | Component (**Green**, **Red**, **Black**) | MPS |
| ☎ | Phone Line (**Green**, **Blue**, **Yellow**) | Call Processing (Physical) Line |
| A | | Administrative (Logical) Line |

### Start the Terminate or Unassign Lines Action

Start the Application Manager from the PeriView Toolbar by clicking the icon

- **Designate and expand a domain (if applicable).**

Initiate the Terminate or Unassign Lines action by clicking the checkbox next to either action.

### Window Icons

Icons display in the Locations scrolling windows are cues to application, phone line, and component information. These icons also display with the Assign/(Re)Start Lines, Status, and Line Start order for Reboot tools.

These icons symbolize: administrative applications that are configured to execute completely before other applications are started; applications configured not to start at reboot; components; and, call processing and administrative phone lines, which are color coded to indicate state.

For information about configuring applications that display with these icons, see ***Configuration Options' Categories*** on page 73.

### Terminate and Unassign Actions

When you use the Terminate or Unassign Lines action, all display areas are inactive until at least one action is selected. Then, depending upon the selected action(s), only relevant display areas activate. You must select Apply to effect an action.

These actions are summarized in the following table.

| Action | Description | Active Area |
|---|---|---|
| Terminate | After you press Apply, currently executing application(s) terminate at the selected location(s), sequentially, one line at a time in the order in which selected locations are listed. | Locations<br>Options<br>• Hard Terminate |
| Terminate Unassign | After you press Apply, currently executing applications first terminate, then are unassigned from the selected location(s), sequentially, one line at a time, in the order in which selected locations are listed.<br>Any application, which is not currently executing but is assigned to a location, is unassigned. | Locations<br>Options<br>• Hard terminate<br>• Remove |
| Unassign | After you press Apply, applications, are unassigned from the selected location(s), sequentially, one line at a time, in the order in which selected locations are listed.<br>Any currently running application is terminated before being unassigned. | Locations<br>Options<br>• Remove |

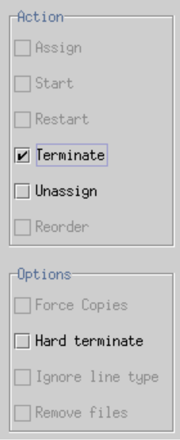
### Select Terminate/Unassign Options

You can specify an Option for Action you selected. Hard Terminate is active only when you select Terminate and affects how a call is in progress is terminated. Remove is active only when you select Unassign and it performs file a maintenance function.

**Hard Terminate**

During the terminate process, by default, application termination is delayed until either the currently processing call completes its execution cycle or the kill timer limit has expired (whichever comes first).

The Hard Terminate option allows for either the abrupt (hard) or delayed (soft) termination of a currently executing application. When applications are terminated abruptly, any calls that are processing are cut off.



Action

□ Assign
□ Start
□ Restart
☑ Terminate
□ Unassign
□ Reorder

Options

□ Force Copies
□ Hard terminate
□ Ignore line type
□ Remove files

When Terminate is selected as an action, soft terminate is enabled.

The call in progress (if any) is allowed continue up to the value defined for the kill timer. The call either terminates naturally within this period or the application terminates the call when the Kill Timer value expires.

To disable soft termination and enable hard termination, check Hard Terminate. The call in progress is terminated abruptly (not allowed to follow through to completion) before terminating the application.

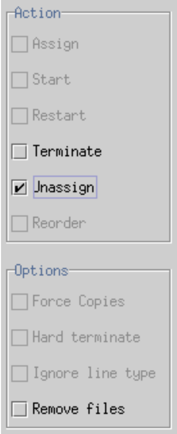
### Remove

During the unassign process, by default, the executable (`*.vex`) and configuration (`*.acfg`) files of the application to be terminated remains in the file system on the node where the application is processing.

This option allows for the executable and configuration files (`*.vex` and `*.acfg`) of main applications (applications that have been assigned to phone lines) to be removed from the file system to which they were copied when the application was assigned.

- If an application is to both process on an MPS node and execute on the MPSs phone lines, the files reside on the MPS node.

One copy of each of these files must reside on the node where an application is processing until the last instance of the application is unassigned. (Thus, this parameter applies only when the last occurrence of an application is being un-assigned from a location.) The files being deleted were copied to the directory `$MPSHOME/componentN/apps` on the processing node when the application was assigned to the location.



Action

☐ Assign

☐ Start

☐ Restart

☐ Terminate

☑ Unassign

☐ Reorder

Options

☐ Force Copies

☐ Hard terminate

☐ Ignore line type

☐ Remove files

When Unassign is selected as an action, Remove is disabled by default.

Files are removed from the processing node when the last occurrence of an application is un-assigned. They remain in the `/apps` directory.

To enable file removal when the last instance of an application is un-assigned from a location, check the Remove option.

An application's executable and configuration files (`*.vex` and `*.acfg`) are deleted from the processing node's `/apps` directory **only** when the last occurrence of an application is unassigned from the location.

### Terminate and Unassign Lines

You can select Terminate, Unassign, or both Terminate and Unassign. However, you must select Apply before an action becomes effective. You can select either a single action or a combination of actions and apply them to one or more locations. Valid actions are described individually in the sections that follow.

When applications are to be terminated, the termination type determines whether application termination is abrupt or delayed.

When you select Terminate in the Actions display area, applications are terminated at selected locations, one line at a time, in the order in which they are listed. The application can only be terminated by the user that assigned application (with the exception of `root`).

By default, applications Soft Terminate, unless Hard Terminate has specifically been selected in the Options display area.

Terminated applications remain assigned to the locations to which they were assigned. Terminate applies only to lines on which applications have been both assigned and started (and display with a **green** icon). Once the application is terminated, the phone line object displays as a **blue** icon.

The execution cycle of an application ends when it is terminated. That is, no further iteration of the application occurs, when termination is selected. This application can be restarted by selecting the Start action

When you select Unassign in the Actions display area, applications are unassigned from selected locations, one line at a time, in the order in which they are listed. The application can only be un-assigned by the user that assigned application (with the exception of `root`). Once the application is un-assigned, the phone line object displays as a **yellow** icon.

When you attempt to unassign a currently executing application from a location, the application is first terminated, then un-assigned from the location.

### Define the Termination Type

Termination type allows for either the abrupt (hard) or delayed (soft) termination of a call in progress when an application is to be terminated.

When applications are terminated abruptly, any calls that are processing are cut off. Alternatively, you can delay termination until either the currently processing call completes its execution cycle or the kill timer limit has expired (whichever comes first).

The kill timer defines the amount of time that an application can remain active after a soft termination signal is issued. This parameter is defined with the Configuration tool at the Execution Options category.

For additional information, see ***Execution Options*** on page 84.

### To define Termination Type:

When an application may needs to be terminated, you select the termination type. This applies to all locations that have been selected for the action.

Select or Soft or Hard. (Default is Soft.)

Soft: The call in progress (if any) is allowed continue up to the value defined for the kill timer. The call either terminates naturally within this period or the application terminates the call when the Kill Timer value expires.

Hard: The call in progress is terminated abruptly (not allowed to follow through to completion) before terminating the application.

When you select both Terminate and Unassign in the Actions display area, applications are sequentially terminated then unassign from the phone line, one line at a time, in the order in which they are listed. The application can only be terminated or un-assigned by the user that assigned application (with the exception of `root`).

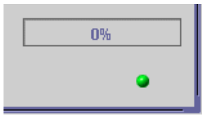
Once the application has been terminated, the phone line object displays as a **blue** icon. After the application is un-assigned, the phone line object displays as a **yellow** icon.

When applications are to be terminated, by default, they soft terminate unless you explicitly enable the Hard Terminate Option.

When you attempt to unassign a currently executing application from a location, the application first terminates, then is unassigned from the location.

### Terminate/Un-Assign Lines Progress

The rate at which applications are Terminated, Unassigned, or Terminated and Unassigned displays to the screen in the form of a Progress Box.



As the indicator bar progresses from 0–100%, the name of the application and the location to which it is being terminated/unassigned displays in the window.

The Terminate/Unassign Lines process can be halted by selecting Cancel.

## Reorder Action

Use the Reorder action to control the default order in which previously assigned applications are assigned and started (if so configured) when the system reboots.

The order in which applications are listed is the default order in which they are assigned whenever the system reboots. This order also is reflected in the Locations section. Although all listed applications are assigned when the system reboots, only those applications that you configure to Start on Reboot are both assigned and started.

As you assign applications, their names are appended to this list. To ensure the correct default assign start order, you may have to reorder the list, with this action, after you assign applications, with the Assign/Start/Restart Lines actions.

The MPSs scrolling window identifies all MPSs defined for the domain in the workspace.

The Lines scrolling window indicates application-specific information.

⌛ The Wait for Exit icon indicates that the application is configured as administrative with Wait for Exit enabled. The No Restart icon indicates that the application is configured not to restart automatically when the system reboots.

- The Line column identifies the line to which the application is assigned on the component that is selected in the Comps scrolling window.
- The Application column identifies the name of the application assigned to the line.

The User column identifies the name of the user that assigned the application to the location. It is derived from the user name with which the Application Manager was launched. You do not explicitly enter the user name information.

### How are applications assigned to the list?

Call processing and administrative application names, locations, and icons are added to the list during the Assign process. Linked applications are not displayed in this list. Each time you assign a main application, its name is appended to the list.

All applications listed in the Locations window are assigned automatically during reboot. However, only those applications that you configure to Start on Reboot are both assigned and started automatically during reboot.

You define the Start on Reboot at the Execution Options category in the Configure Applications tool.

Applications that you configure not to restart during reboot display with a **blue** (No ReStart) application icon. Applications that display this icon are assigned, but not started, during reboot.

For additional information, see ***Execution Options*** on page 84.

### What determines the assigned/started order?

Applications are assigned and started (if applicable), sequentially, in the order in which they are listed.

Each time you assign a call processing or administrative application to a location, information about the application is appended to this list. Unless you reorder this list (with the Reorder action), applications are always assigned and in the order in which you assign them with the Assign action tool.

### Why reorder the list?

The order in which any application is assigned/started can be critical to successful call processing functions. This tool is especially important to Administrative Applications, which perform system maintenance operations and support call processing applications.

Typically, administrative applications are associated with logical phone lines, which are incapable of processing calls. Administrative applications that are configured as initialization applications, are assigned, started and complete their execution cycle before assigning other applications.

You define initialization applications at the Wait for Exit parameter in the Execution Options category in the Configure Application tool.

Administration applications that have been configured to Wait for Exit, display with an initialization icon.

After assigning an application with the Assign action, it is important to use the Reorder action to check the default order and reorder the list, if necessary.

### What affects the order of items on the list?

Initially, the order of this list is determined by the order in which applications were assigned with the Assign action. Once applications are assigned, you can redefine their default assign/start order.

As subsequent applications are assigned with the Assign action, they are appended to the list in the Locations window. To maintain the correct order, check the list after assigning applications and reorder the list if necessary.

### Where is the information stored?

When you assign a main application (call processing or administrative) with the Assign action, information about the application is appended to the configuration file `aseLines.cfg`. This file identifies the list of applications that execute on the specified component and the phone lines to which they are assigned.

The `aseLines.cfg` file resides at the following locations.

Solaris: `$MPSHOME/component_typeN/etc/aseLines.cfg`

Windows 2000:`%MPSHOME%\component_typeN\etc\aseLines.cfg`

Each time you assign a main application, the name of the application, the line to which it is assigned, and your user name, gets appended the list in this file.

The order in which applications are listed in `aseLines.cfg` determines the order in which applications are listed when the Application Management window is opened. When the list is reordered with the Reorder action, the new order is saved in the `aseLines.cfg` file.

### How do I reorder the list?

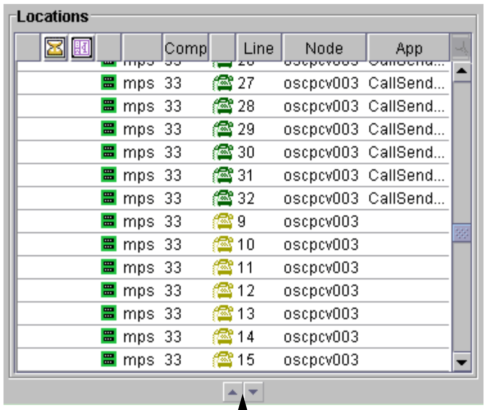
You define the Line Start Order by selecting the component and lines that are to be reordered. You can reorder this list using the up and down arrows. Any move must be applied before it becomes effective.

When you reorder the lines that are in use, ensure that all the lines (that need to be re-ordered) are selected.

**To define the line start order:**

- In the Comps scrolling window, select the component where the phone lines are to be reordered.
- In the Lines scrolling window, select the application(s) that are to be reordered. You can select and move applications individually or you can multiply select applications and move the group.

Select applications by <LEFT> clicking the mouse button on the line to be moved. A line must be selected before it can be reordered.



Locations

| | Comp | | Line | Node | App |
|---|---|---|---|---|---|
| mps | 33 | ☎ | 27 | oscpcv003 | CallSend... |
| mps | 33 | ☎ | 28 | oscpcv003 | CallSend... |
| mps | 33 | ☎ | 29 | oscpcv003 | CallSend... |
| mps | 33 | ☎ | 30 | oscpcv003 | CallSend... |
| mps | 33 | ☎ | 31 | oscpcv003 | CallSend... |
| mps | 33 | ☎ | 32 | oscpcv003 | CallSend... |
| mps | 33 | ☎ | 9 | oscpcv003 | |
| mps | 33 | ☎ | 10 | oscpcv003 | |
| mps | 33 | ☎ | 11 | oscpcv003 | |
| mps | 33 | ☎ | 12 | oscpcv003 | |
| mps | 33 | ☎ | 13 | oscpcv003 | |
| mps | 33 | ☎ | 14 | oscpcv003 | |
| mps | 33 | ☎ | 15 | oscpcv003 | |

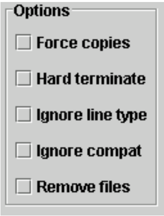
Click to move

- Continue with the reorder process until the Lines scrolling window reflects the correct default order.

- **Select** Apply

  Apply:Applies the order listed in this window. In the event of system reboot, applications are assigned and started (if so configured) in the order in which they are listed in the Lines scrolling window. Also, each time the Application Management window is opened, this order is reflected in the Locations listing (unless applications have been assigned after reordering the list).

## Application Management Options



Options

□ Force copies

□ Hard terminate

□ Ignore line type

□ Ignore compat

□ Remove files

Application Management Options include Force copies, Hard terminate, Ignore line type, Ignore compat and Remove Files.

### Force copies Option

This option allows for application related files to be copied during assignment even if the destination locations are newer than the source locations.

### Hard terminate Option

This option is active when you select Terminate as an action. This parameter allows for either the abrupt (hard) or delayed (soft) termination of a call in progress when an application is to be terminated.

This option is also considered when a Restart is done or when a line is to be reassigned with a different application and it requires a termination.

### Ignore line type Option

This option is disabled by default and ensures that you are automatically informed of the consistency between application type (call processing and administrative) and line type (physical and logical).

### Ignore compat Option

This option ensures that the release compatibility checking is not performed to warn if an application is assigned to a component when it is not compatible.

### Remove Files Option

This option is active only when you select Unassign as an action. This parameter enables the automatic deletion of the executable (`*.vex`) and configuration files (`*.acfg`) for main applications, during the Unassign process, when the last occurrence of the application is un-assigned. This option also enables removal of shared libraries.

## Application Management Event Cycle

This set of procedures is designed to identify the events that can occur during an application's life cycle, from the point of view of the Application Management tool.

**Step** **APPMAN Events Time Line** *Sheet 1 of 4*

**1** **Create and Generate/Compile Application.**

Create a PeriProducer application in the directory designated for development. Be sure to incorporate the definition of any statistical events for which statistics are to be generated.

Before you can implement an application, you must create an executable version of the application.

- To create an executable for a **PeriProducer** application, use the PeriProducer Generate function. For information about generating an application, refer to the *PeriProducer User's Guide*.
- To create an executable for an application, use the **makeapp** command, which is issued from a command line. In the following example, the **makeapp** command is issued to compile the source code file **newapp.cob**.

```
vsh.5@is5{1} -> makeapp newapp.cob
Compiling under: @ (#) Avaya: 1.31, 5.3.0, 06/30/97
181
vrc: newapp.cob parsed with no errors
vrc: newapp.cob finished ok.
```

All required files (*.vex, *.acfg, *.so, *.dll) is copied from the user's development directory to the required locations on the component during the **Assign** process (Step #3).

**2** **Define a Configuration File and Shared Libraries.**

**2a** **Configuration File:**

Optionally (at this time), define a configuration file for this application with the **Application Configuration window.** If a configuration file is defined for an application, both the executable file (*.vex) and its configuration file (*.acfg) must exist in the same development directory for them to be copied to the component during the Assign process (Step #3).

If a configuration file (*.acfg) is not defined before the application is assigned, a default configuration file is created automatically during the **Assign** process.

All required files (*.vex, *.acfg, *.so, *.dll) is copied from the user's development directory to the required locations on the component during the **Assign** process (Step #3).

To remove configuration files (as well as executable and shared libraries) from their location on a component when they are no longer needed, use the **Remove Files** option.

| Step | APPMAN Events Time Line *Sheet 2 of 4* |
|---|---|
| **2b** | **Shared Libraries:**<br>Create/Compile any shared libraries (`*.so` or `*.dll`) that the application requires. You associate shared libraries with an application with the **Application Configuration window**.<br>You must define the full path name of the shared libraries in the application's configuration file (`*.acfg`) so that they can be copied to the component along with the application's executable (`*.vex`) and configuration (`*.acfg`) files during the Assign process (Step #3).<br>When the application's executable file is copied to the component during the Assign process, its configuration file and any shared library files (if Copy File is checked) associated with the application are also copied to the component (Step #3).<br>To remove shared libraries (as well as executable and configuration files) from their location on a component when they are no longer needed, use the **Unassign** option. |

**Step** **APPMAN Events Time Line** *Sheet 3 of 4*

**3** **Assign an Application**

The **Assign** process copies an application's executable (*.vex), configuration (*.acfg), and shared library (*.so or *.dll) files from a development directory to an MPS and associates the application with specific phone lines on an MPS.

Executable and configuration files (*.vex and *.acfg) are copied to the following locations on the node where they will process.

Solaris: $MPSHOME/component_typeN/apps
Windows 2000:%MPSHOME%\component_typeN\apps

Shared libraries (*.so or *.dll) are copied to the following locations on the component where the application will be processed.

Solaris: $MPSHOME/component_typeN/apps/lib
Windows 2000:%MPSHOME%\component_typeN\apps\lib

If a configuration file (*.acfg) for this application is located in the same directory as the executable file (*.vex), it is also copied to the $MPSHOME/componentN/apps directory (on the component where application processing occurs) during the **Assign** process.

- If no configuration file exists when the application is being assigned, you have the option to create a default configuration file during the Assign process.

- Alternatively, you can define a configuration file with the **Application Configuration window,** then use the **Assign action** to assign the application.

Both an application's executable and configuration files (*.vex and *.acfg) must exist in the following directories before starting the application, with the **Start** process (Step #4).

Solaris: $MPSHOME/component_typeN/apps
Windows 2000:%MPSHOME%\component_typeN\apps

Any shared libraries required by the application must be located in the following directory paths before starting the application (see Step #2). All files are copied to their respective directories on the component where the application will be processed.

Solaris: $MPSHOME/component_typeN/apps/lib
Windows 2000:%MPSHOME%\component_typeN\apps\lib

To define the order in which applications are assigned and started in the case of system reboot, use the **Reorder action**. Each time an application is assigned, it gets appended to the end of the previously defined list. To ensure that the correct assign/start is defined, be sure to check this tool after assigning applications.

| Step | **APPMAN Events Time Line** *Sheet 4 of 4* |
|---|---|
| **4** | **Start an Application**<br>The **Start** process initiates the application's execution cycle at location where it is assigned. At this point, all required files (`*.vex`, `*.acfg`, `*.so`, `*.dll`) are copied to their respective directory locations on the MPS component during the **Assign** process.<br>To terminate an application and/or disassociate it from the phone line to which it was assigned/started, use the **Terminate or Unassign Lines actions.**<br>To redefine a configuration file for an application that has been assigned or started, modify the configuration file, terminate/un-assign any applications that have been assigned/started, and assign/start the application with the modified configuration file (Step #6). |
| **5** | **Modify the Application (if applicable).**<br>Typically, a user modifies an application at a local drive designated for development purposes. Once all changes to the application are complete and the application is recompiled/regenerated, it must be copied to the component where processing occurs, during the **Assign** process (Step #3).<br>In the case of applications that have been assigned/started prior to the modification, the original version continues to execute until it is terminated/un-assigned.<br>To replace the original version of the application with the modified version for previously assigned/started applications, all assigned versions of the original application must be terminated (if executing) and un-assigned from the locations to which it was assigned with the **Terminate or Unassign Lines actions**.<br>To process the modified application, the application must be assigned with the **Assign action** (Step #3). |
| **6** | **Modify an Application's Configuration File (if applicable).**<br>Use the **Application Configuration window** to redefine a previously existing configuration file. The modified configuration file is associated with the application during all subsequent **Assign** processes (Step #3).<br>In the case of applications that have been assigned/started before the modification, the application continues to execute with the original (unmodified) configuration file.<br>To replace the original version of the configuration file with the modified version for previously assigned/started applications, all assigned versions of the original configuration must be terminated (if executing) and un-assigned from the lines on which it was assigned with the **Terminate or Unassign Lines action**.<br>To process the application with the modified configuration file, the application must be assigned with the **Assign action** (Step # 3). |

### Application Revision Control

When an application is created it must be compiled before it can be assigned to a line. (It is the compiled version of the application that actually gets assigned to a line.)

The following information is applicable to Windows 2000 environment.

All instances of an application must be terminated. The application's `*.vex` file in the `/apps` directory is copied when a modified version of the application is assigned to any lines on a component. This prevents two versions of the same application from running concurrently.

If you attempt to assign a application that is a modified version of one that is currently running to any phone lines on a component, you get the following message.

Press OK to continue. Terminate the application on all the lines to which it is assigned. Then, proceed to assign the modified version of the application to a component's phone lines.

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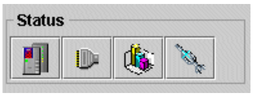
5

# Status Tools

**This chapter covers:**

1. **Introduction to the Status Tools**
2. **Working with the Status Tools**
3. **Overview**
4. **Phone Line Status**
5. **Phone Line Status Bar Graph**
6. **Component Span Status**
7. **Component Host Status**

## Introduction to the Status Tools



Use the Status Tools to monitor activity in the environment. You monitor component and application phone line status with a set of graphs, which you launch using tree objects (domain, node, component, or application). The Linked Application Status graph provides information about main applications that link to other applications during their execution cycle. The Span and Host Status tools display information about digital spans and external hosts, on a per component basis.

The suite of tools on the tool bar provide for monitoring component and application activity. Although TMSCOMM, and OSCAR objects display in the tree, these components cannot be monitored with the current suite of tools. These objects do provide information about the environment in which you are monitoring activity.

For information about OSCAR resource processing, refer to the *OSCAR Reference Guide*.

You can display phone line status for single or multiple components and applications in a pie, bar, or stacked bar graph. You can launch the Linked Application Status bar graph only for a single, currently executing, application. Phone line status updates at a pre-defined interval (set in the PeriView Data Provider) as a percentage of phone line usage or in absolute numbers of lines.

You can launch multiple graphs consecutively. Each graph displays in its own window, functions independently of other graphs, and can be assigned unique graph properties. The windows can be moved, resized, or iconified.

Once you launch a graph, it continues to monitor activity, even while iconified. The iconified graph continually polls components and alerts the operator to potential problems by emitting a beeping sound and displaying a flashing movement (if so configured) when the system being monitored does not respond. The graph can be selectively restored to size to view activity, then iconified while maintaining a perpetually active state.

## Working with the Status Tools

You can select any of the Status tools, which include Phone Line Status graphs, Linked Application Status graphs, Component Span Status, and Component Host Status.

- **Phone Line Status graphs (pie, stacked bar, bar):**

  You can monitor phone line status for any component or main application configured for the domain displayed in the workspace.

- **Linked Application Status Bar graph:**

  You can monitor phone line status and linking activity only for a currently executing main application (and its associated linked applications) configured for the domain displayed in the workspace. (A currently executing applications has been assigned, started, and displays as **green** application tree object.)

  Applications are assigned and started with the Application Manager tool. Refer to ***Introduction to Application Management*** on page 109.

- **Component Span Status:**

  You can monitor the status of digital spans for any component defined for the domain displayed in the workspace.

- **Component Host Status:**

  You can monitor the status of external hosts for any component defined for the domain displayed in the workspace.

## Tree Objects Without Phone Lines

Phone Line Status graphs display information about the physical state of phone lines for a specific period of time. Therefore, you can only launch graphs with tree objects that are either configured with phone lines or are associated with a specific application (which is assigned to phone lines). For information about specific phone line states, see ***Phone Line Status*** on page 150.

You can not launch a graph with a tree object that is not configured with phone lines, *unless* it you expand it from an application (it has an application as an ancestor). In that case, the tree object launches the graph only for the application from which it was expanded. The graphs you launched by the application, and each of their child tree objects, are identical and reflect the activity of the application.

## Overview

The four Status tools display information in either graph format or a status window.

- **Phone Line Status graphs (pie, stacked bar, bar):**

  You can monitor current phone line status for any MPS, or main application displayed in the workspace. To launch a Phone Line Status pie, stacked bar, or bar graph click the following icon:

- **Linked Application Status Bar graph:**

  You can monitor linked application activity only for a single, currently executing, main application (a **green** application object). Applications are assigned and started with the Application Manager tool. For information about assigning and starting lines, see ***Introduction to Application Management*** on page 109. To launch a Linked Application Status Bar graph click the following icon:

- **Component Span Status:**

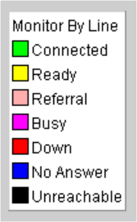
  You can display the status of digital spans, graphically, for any component defined for the domain displayed in the workspace. To launch a Span Status window click the following icon:

- **Component Host Status:**

  You can display the status of an external host, graphically, for any component defined for the domain displayed in the workspace. To launch a Host Status window click the following icon:

## Phone Line Status

Phone line status refers to the physical state of phone lines for a specific period of time. Phone line status indicates what is actually happening on the line during a time period. You can monitor the current phone line status for MPS and the applications. Phone line status is defined by seven color coded activity states, which display along the y-axis of each graph.



Monitor By Line

🟩 Connected
🟨 Ready
🟧 Referral
🟪 Busy
🟥 Down
🟦 No Answer
⬛ Unreachable

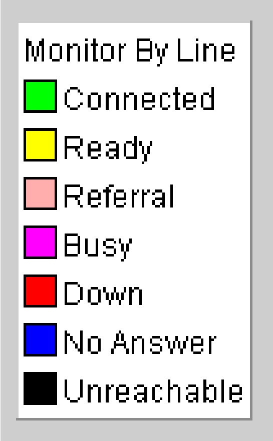
The Activity Monitor quantifies and displays each the following phone line states: **Connected**, **Ready**, **Referral**, **Busy**, **Down**, **No Answer**, and **Unreachable**. These six phone line states are defined in the following table.

| Phone Line State | Color | Description |
|---|---|---|
| Connected | **Green** | The monitor detects ongoing interaction between the MPS phone lines and callers, indicating calls are in progress on these lines. |
| Ready | **Yellow** | The monitor detects the MPS phone lines are in service and ready to take calls. |
| Referral | **Orange** | Detected activity is dependent upon the type of referral method that has been instituted—either a hook flash or digital referral method. |
| Hook Flash Referral | | The monitor detects if the MPS phone lines are in the process of referring the call to an operator. |
| Digital Referral | | Activity can be in one of the two following states:<br>• The lines are in the process of referring to operators.<br>• The callers are interacting with operators |
| Busy | **Purple** | The monitor detects the MPS phone lines are in an in-service-busy state and not able to take calls. |
| Down | **Red** | The monitor is able to contact the MPS phone lines, but detects the lines are not able to receive calls, indicating that these lines can be faulty. |
| No Answer | **Blue** | The line is Idle and the state is set to no answer. |

| Phone Line State | Color | Description |
|---|---|---|
| Unreachable | **Black** | Phone line status has been queried for its state and no message has been received by the Monitor (basically, a missed response).<br>Also, it could mean that SRP did not respond to information about the phone line from the Monitor. The Monitor needs to query SRP about how it should contact the CCM (Call Control Manager) process, before it can actually contact CCM. |

## Phone Line Status Graph Display

A Phone Line Status graph monitors the physical activity state of phone lines for applications or MPS components. A phone line can be in any one of seven activity states: **Connected**, **Ready**, **Referring**, **Busy**, **Down**, **No Answer**, and **Unreachable**.



Monitor By Line

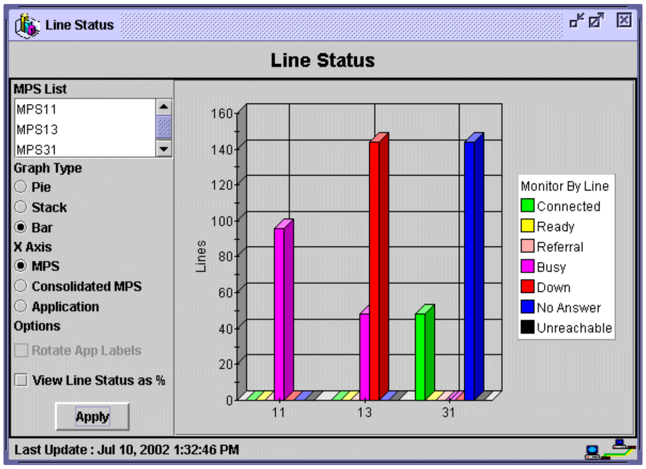
- 🟩 Connected
- 🟨 Ready
- ■ Referral
- 🟪 Busy
- 🟥 Down
- 🟦 No Answer
- ⬛ Unreachable

You can launch graphs from any of the following tree objects: a domain, a node, a single MPS, a single application, multi-selected MPS, and multi-selected applications.

You can monitor activity for multiple MPS, or applications on a cumulative or individual basis. A tree object can represent a single entity (as in the case of a single MPS or application), a collection of entities (as in the case of a domain, group, or node), or multi-selected MPS or applications. A graph can monitor activity for either the single entity, the collection of entities, or multi-selected MPS and applications.

When a tree object represents a collection of entities (domain, node), only a single tree object can be graphed. Alternatively, you can multi-select and graph MPS and applications. (Each MPS or application represents a single entity, never a collection of entities.) For example, you can graph either the domain, or a node. You cannot graph multi-selected nodes. To choose multiple MPS or applications, hold the CTRL key while choosing.

This graph was launched with three multi-selected MPS. The graph displays with three sets of graph points, one set for each MPS. The x-axis label identifies the names of the MPS that are being monitored.



Line Status

Line Status

MPS List
MPS11
MPS13
MPS31

Graph Type
○ Pie
○ Stack
● Bar

X Axis
● MPS
○ Consolidated MPS
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Monitor By Line
🟩 Connected
🟨 Ready
■ Referral
🟪 Busy
🟥 Down
🟦 No Answer
⬛ Unreachable

Last Update : Jul 10, 2002 1:32:46 PM

You can monitor phone line status in either pie or bar graph format. A pie graph always depicts activity from a consolidated viewpoint. (A pie graph always depicts the relationship between the whole and its parts.) Unlike the pie graph, bar graphs can display activity from either a consolidated or individual viewpoint.

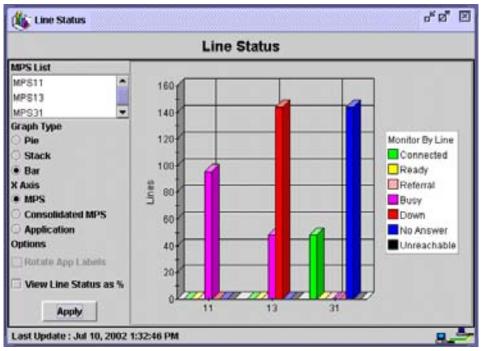
- A consolidated viewpoint depicts activity for the entity with a single set of bars, which represent all members collectively.
- The individual viewpoint depicts activity for the entity with a single set of bars for each individual member.

Bar graphs that are launched by multi-selected MPS or applications, initially display the individual viewpoint. However, once a graph is launched, this point of view can be changed by clicking an option under the X Axis heading.

Bar graphs that are launched by an object, which represents a collection of entities (a group, a domain, or node), initially display the consolidated viewpoint.

The consolidated and individual viewpoints for bar graphs that monitor a single MPS or application appear identical, as there is only a single set of information to graph.

In the following graphs, phone line status is being monitored for three MPS.



Line Status

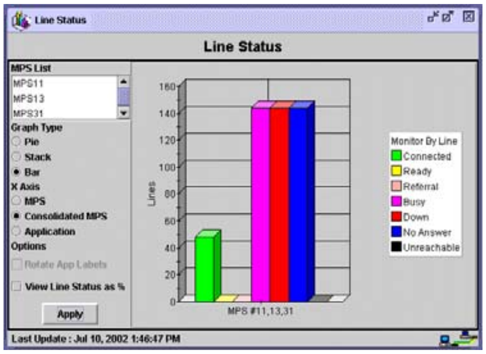
MPS List: MPS11, MPS13, MPS31

Graph Type: ○ Pie ○ Stack ● Bar

X Axis: ● MPS ○ Consolidated MPS ○ Application

Options: □ Rotate App Labels □ View Line Status as %

Last Update : Jul 10, 2002 1:32:46 PM



Line Status

MPS List: MPS11, MPS13, MPS31

Graph Type: ○ Pie ○ Stack ● Bar

X Axis: ○ MPS ● Consolidated MPS ○ Application

Options: □ Rotate App Labels □ View Line Status as %

Last Update : Jul 10, 2002 1:46:47 PM

- The graph with three sets of graph points was launched by multiply selected MPS objects and displays activity for each of the three MPS, individually.
- The graph with the single set of graph points displays activity, collectively, for all three MPS because the viewpoint was changed from Individual MPS to Consolidated MPS under the X Axis heading.

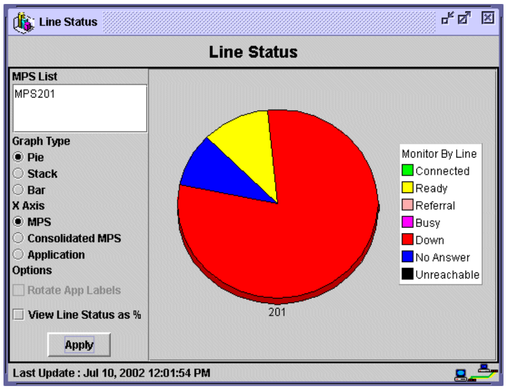
## Phone Line Status Graph Types

You can monitor phone line status in either a pie, stacked bar, or bar graph format. Pie graphs offer only a consolidated view of tree object activity. Bar graphs can display either consolidated or individual views.

Examples of the three types of Phone Line Status graphs follow. Each of the graphs were launched by the domain `Avaya` from node `MPS201`, which is indicated by each of the Consolidated Graph Frame Labels (`201`).

Pie graphs display a consolidated view of phone line activity and phone line status for the entity you are monitoring.

A pie graph displays the fractional composition of the parts with respect to the whole.


Line Status

MPS List: MPS201

Graph Type: ● Pie ○ Stack ○ Bar

X Axis: ● MPS ○ Consolidated MPS ○ Application

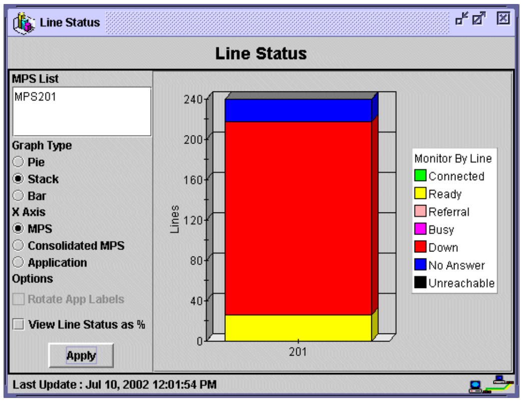
Options: □ Rotate App Labels □ View Line Status as %

Last Update : Jul 10, 2002 12:01:54 PM

Stacked bar graphs display a collective view of phone line activity and phone line status for the entity you are monitoring.

A stacked bar graph displays the percentage composition of the parts with respect to the whole. Each segment of the bar indicates the percentage of phone line activity for each state.

The cumulative value of the bar is equal to 100% of the phone lines assigned to the entity being monitored.


Line Status

MPS List: MPS201

Graph Type: ○ Pie ● Stack ○ Bar

X Axis: ● MPS ○ Consolidated MPS ○ Application

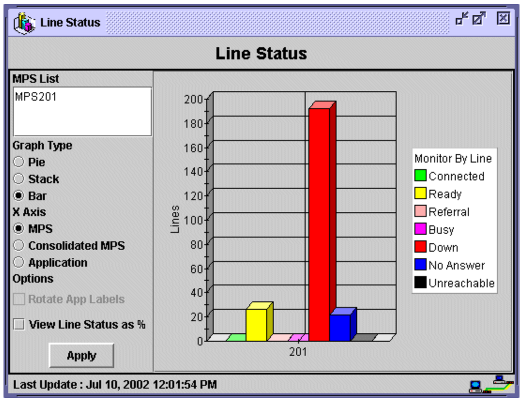
Options: □ Rotate App Labels □ View Line Status as %

Last Update : Jul 10, 2002 12:01:54 PM

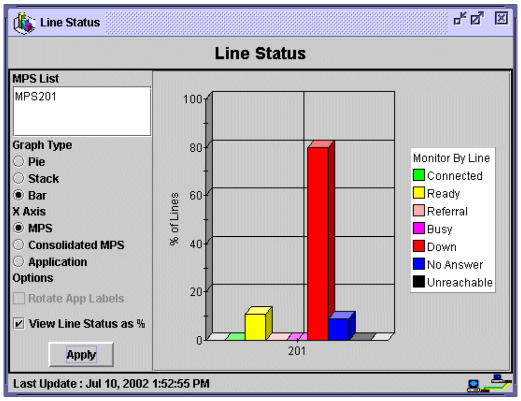
The bar graph displays a single point view of phone line activity and phone line status for the entity you are monitoring.

You can express activity in absolute numbers of phone lines (the default) or as percentage of the total number of phone lines. To change to percentage, select the “View Line Status as %” option and click Apply.

When you express activity as a percent, each bar indicates percentage of phone lines in a specific phone line state. The cumulative value of a set of bars is equal to 100% of the phone lines assigned to the entity being monitored.



Last Update : Jul 10, 2002 12:01:54 PM



Last Update : Jul 10, 2002 1:52:55 PM

Phone line status graphs monitor activity for analog, digital, or mixed (analog and digital) systems. You can also monitor phone line status for MPS that are configured (exclusively or partially) with digital spans, with the Component Span Status tool. For additional information, see ***Component Span Status*** on page 167.

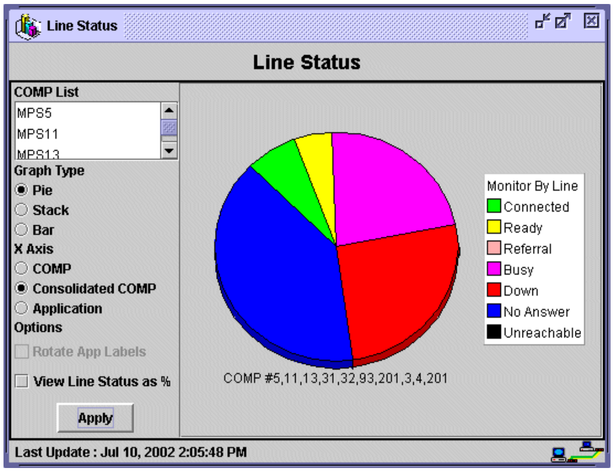
## Consolidated versus Individual Viewpoints

The two sets of graphs in this example illustrate the difference between monitoring an entity from consolidated and individual viewpoints. Both sets of graphs were launched from the domain Avaya and each set consists of all three Phone Line Status graph types. The bar graph displays phone lines both as a percentage (of the total number of phone lines) and in absolute numbers (of phone lines).

- Graph Set A represents the graphs as they were initially launched. The graphs display a consolidated view of phone line status. Bar graphs display status with a single set of bars, which monitors the cumulative activity for all MPS and their assigned applications.
- Graph Set B represents the individual view, which was explicitly specified at each graph's Line Status Graph Properties window, after the graphs were launched. Status displays with two sets of bars—one set for each MPS. Activity is monitored, individually, for each MPS (and their assigned applications) within the domain Avaya.

### Set A - Consolidated View

All graphs display phone line status, cumulatively, for all MPS in the domain `Avaya`. A single set of bars monitor MPS activity, collectively, for all MPS.



Line Status

COMP List
MPS5
MPS11
MPS13

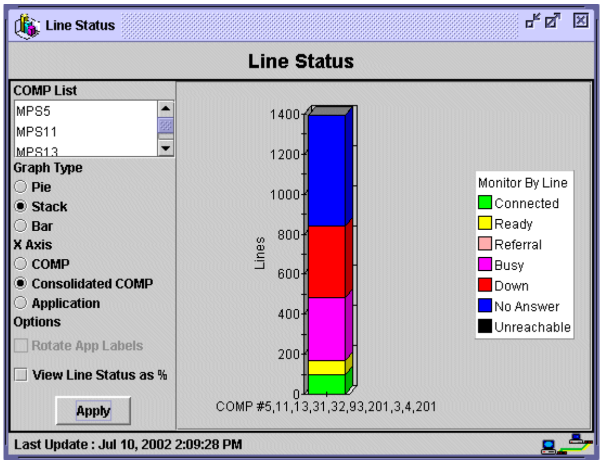
Graph Type
● Pie
○ Stack
○ Bar

X Axis
○ COMP
● Consolidated COMP
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:05:48 PM



Line Status

COMP List
MPS5
MPS11
MPS13

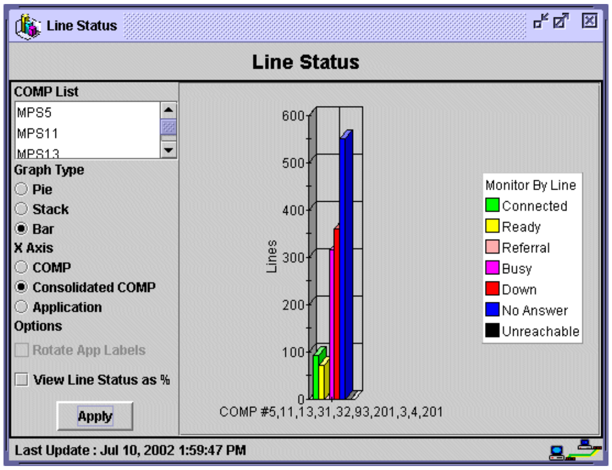
Graph Type
○ Pie
● Stack
○ Bar

X Axis
○ COMP
● Consolidated COMP
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:09:28 PM



Line Status

COMP List
MPS5
MPS11
MPS13

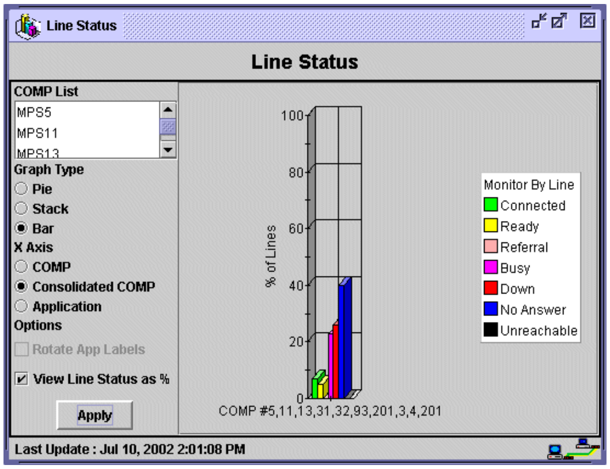
Graph Type
○ Pie
○ Stack
● Bar

X Axis
○ COMP
● Consolidated COMP
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 1:59:47 PM



Line Status

COMP List
MPS5
MPS11
MPS13

Graph Type
○ Pie
○ Stack
● Bar

X Axis
○ COMP
● Consolidated COMP
○ Application

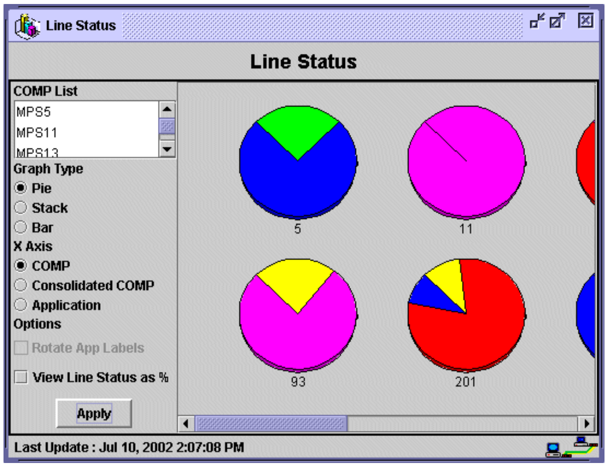
Options
□ Rotate App Labels
☑ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:01:08 PM

### Set B - Individual View

The three bar graphs display phone line status, individually, for each MPS in the domain `Avaya`. Activity for each MPS is monitored with an individual set of bars monitors.



Line Status

Line Status

COMP List
MPS5
MPS11
MPS13

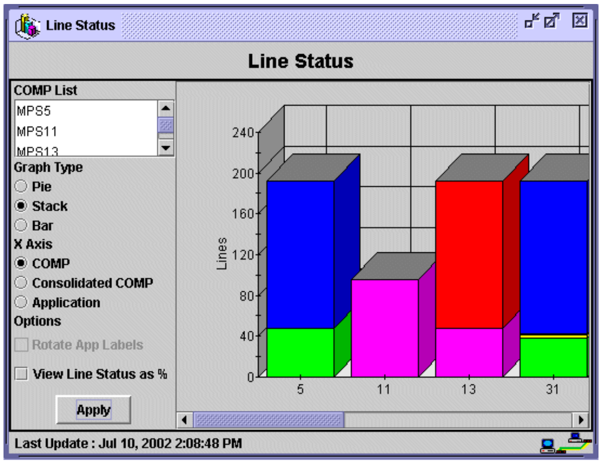
Graph Type
● Pie
○ Stack
○ Bar

X Axis
● COMP
○ Consolidated COMP
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:07:08 PM



Line Status

Line Status

COMP List
MPS5
MPS11
MPS13

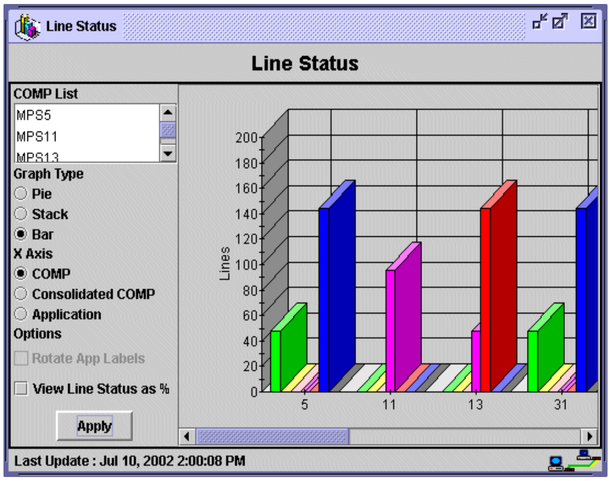
Graph Type
○ Pie
● Stack
○ Bar

X Axis
● COMP
○ Consolidated COMP
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:08:48 PM



Line Status

Line Status

COMP List
MPS5
MPS11
MPS13

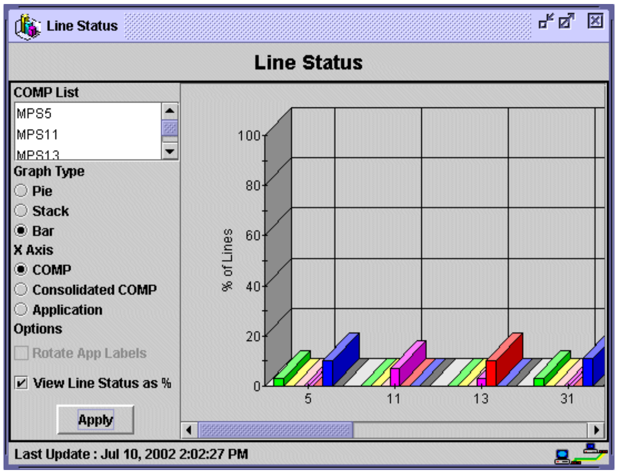
Graph Type
○ Pie
○ Stack
● Bar

X Axis
● COMP
○ Consolidated COMP
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:00:08 PM



Line Status

Line Status

COMP List
MPS5
MPS11
MPS13

Graph Type
○ Pie
○ Stack
● Bar

X Axis
● COMP
○ Consolidated COMP
○ Application

Options
□ Rotate App Labels
☑ View Line Status as %

Apply

Last Update : Jul 10, 2002 2:02:27 PM

Use the scroll bar to view graph points that extend beyond the scope of the graph window size.

## Linked Application Status Bar Graph

The Linked Application Status Bar graph displays the phone line status of a currently executing main application and its linking activity, if any. Linking activity depicts the activity between the main application and the linked applications it links to during its execution cycle.

Although the linked application status graph can be launched for any currently executing main application, the display provides information about the main application and the applications to which it links during its execution cycle.

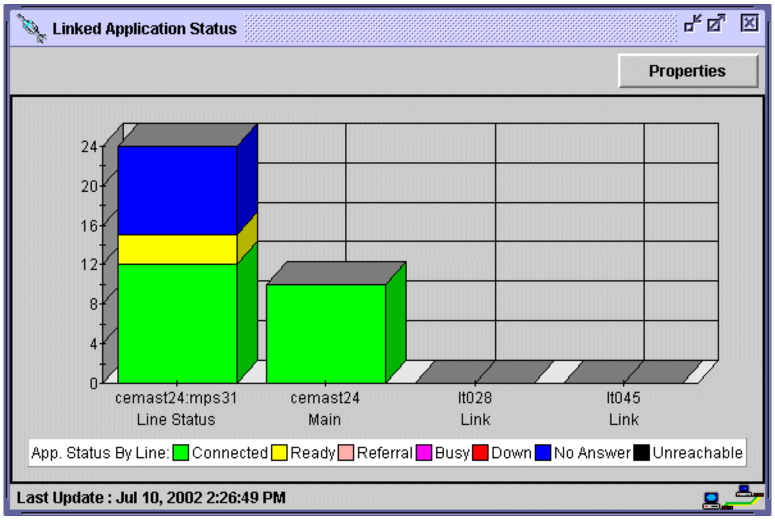
Linked applications are not assigned to phone lines. They are copied to the locations where the main applications (that link to them) are assigned. Then, the linked applications are accessible to the main application during its execution cycle.

A main application that does not link to other applications, always executes on the phone line(s) to which it was assigned. However, when a main application links to another application (linked application), it is the linked application that is executing on the line to which the main application was assigned and started. When the linked application has completed its job, control is returned to the main application.

Use the Application Manager tool administer application activity. Use the Configure Applications tool to configured applications as Main or Linked. Applications are assigned and started with the Assign/Start/Restart Lines action.

### Linked Application Status Graph Display

You can launch the Linked Application bar graph only for a single, currently executing main application. It displays the main application's phone line status and linking activity. The name of the main application and the names of the applications to which it links display at graph points along the X axis. The Y axis displays phone line activity as either a percentage (of the total number of phone lines) or in absolute numbers (of phone lines). The following graph displays the Global Data View of linking activity for a main application.


Linked Application Status
Properties
24
20
16
12
8
4
0
cemast24:mps31
Line Status
cemast24
Main
lt028
Link
lt045
Link
App. Status By Line: 🟩 Connected 🟨 Ready 🟥 Referral 🟪 Busy 🟥 Down 🟦 No Answer ⬛ Unreachable
Last Update : Jul 10, 2002 2:26:49 PM

The display and behavior of Linked Application Status bar graphs is **heavily** dependent upon the properties by which you define each graph.

You can define the number of graph points and specify linked applications that display on the X axis. You can express phone line activity on the Y axis as a percent (of the total number of phone lines) or in absolute numbers (of phone lines).

The number of points that actually display on the X axis can vary. However, the first two points are predefined, represent the main application, and can not be redefined. Each point, beginning with the third point, represents an application to which the main application can link during its execution cycle. The applications that actually display on the X axis are determined both by the graph's properties and the run-time activity of the linked applications.

In this example:

- 24 instances of the main application `cemast24` are assigned and running on `mps1091`.
    - 21 are in a **Connected** phone line state.
    - 3 is in a **Ready** phone line state.
- a total 12 instances of the 21 in a **Connected** phone line state have linked to 8 other applications.
- 9 instances of the 21 in a **Connected** phone line state have not linked to other applications.
- 1 graph point displays the beginning of the name of the linked application that had been active, most recently, in that position. Since there is no linking activity to display at that position, the name remains on the graph until it is replaced with active linking information.

Typically, linking activity displays at graph points in order of descending activity (beginning with the third graph point). The third point on the graph displays the name of the linked application with the greatest activity (or most number of phone lines in a **Connected** phone line state). The remaining graph points display linked applications in order of descending activity, until all points on the graph are filled.

However, you can designate specific linked applications to always display and assign them to permanent graph points (beginning with the third graph point). This ensures their names display at the specified graph points, regardless of their linking activity. These applications are considered *critical applications*.

The term *critical application* refers to an application that can be linked to, from a main application, and is always present on a linked application status graph.

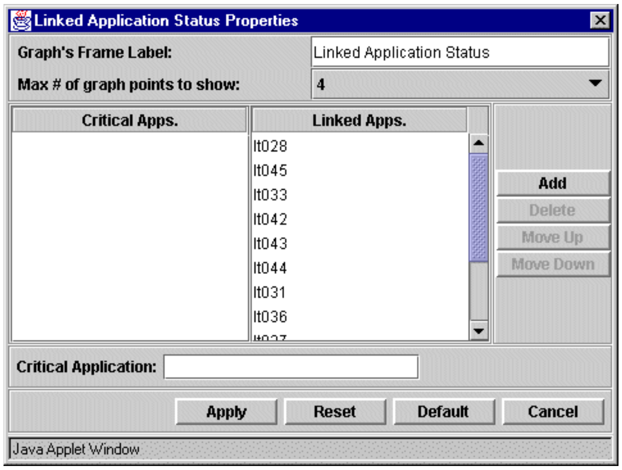
The number of graph points that display, and the critical applications that permanently occupy graph points, are controlled at each graph's Linked Graph Properties window.

Unless all graph points are displayed, not all applications to which a main application can link, are represented by graph points.

Critical applications, which are permanently assigned to graph points, display even when they are inactive.

Use the scroll bar to view graph points that extend beyond the scope of the graph window size.

The Linked Application Status Bar graph always launches with two predefined graph points that represent the main application. When linking activity begins, it displays on the X axis, beginning with the third graph point. You define the total number of graph points that can display at the graph's Properties button. Graph points are summarized as follows:



Linked Application Status Properties

Graph's Frame Label: Linked Application Status

Max # of graph points to show: 4

Critical Apps.

Linked Apps.

lt028
lt045
lt033
lt042
lt043
lt044
lt031
lt036

Critical Application:

- **Point #1 - Main Application (Phone Line Status):**

  The first graph point displays phone line status for all phone lines on which the application is executing. The application name displays along with the number of the MPS on which it is executing. On the graph, this point is labeled `Line Status`.

  The MPS, to which any instance of the main application is assigned, are polled for the current phone line state of each phone line where the main application is currently executing.

  Although the stacking bar for Point #1 can indicate any of the six phone line states, typically most of the bar is **green** (**Connected**) with alternating **yellow** (**ready**) and **purple** (**busy**) bands.

  Only the lines in a **Connected** state are able to link to other applications.

The first graph point displays the same information that you see from any Phone Line Status graph. Basically, Point #1 is a stacking bar graph that displays phone line status for the main application. On the Linked Application Status Bar graph, all other graph points show only applications that are in a **Connected** phone line state.

- **Point #2 - Main Application (Connected phone line state):**

  The second graph point indicates the total number of lines on which the main application is currently executing in a **Connected** state. This bar is always **green**. On the graph, this point is labeled `Main`.

  - When this application is executing on all lines (and has linked to none) this point equals the activity in a **Connected** state at Point #1. Conversely, when this application is linking to all applications, no bar displays at this point.
  - When this main application links to other applications, linked application activity displays at the remaining graph points. The activity at this point (Point #2), plus the activity of all linked points (starting at Point #3), equals the activity in a **Connected** state at Point #1. When there are fewer graph points (displayed on the X axis) than linked applications, you cannot view all linking activity.
  - When every instance of the main application has linked to other applications, the line count at Point #2 reverts to zero (0) and the cumulative activity of all linked points (starting at Point #3) equals the activity in a **Connected** state at Point #1.

- **Point #3 and all other points - Linked Applications:**

  A graph can display with a minimum of three graph points. The first two points are predefined and represent the main application. Linked applications begin to display at the 3rd graph point. On the graph, these applications are labeled `Link`.

  The number of points that display is defined at a graph's Linked Graph Properties window. Applications designated as *critical*, always occupy specific graph point (beginning at the third graph point). The linking activity that actually displays, depends upon the availability of graph points and the activity of individual linked applications.

  - The order in which critical applications display is defined at a graph's Linked Graph Properties window.
  - The order in which non-critical applications display is determined by their level of activity.

  Critical applications always display, even when inactive. Non-critical applications display from left to right in order of descending activity. Graphs display activity in near real-time. You specify the interval and which MPS are polled for new information at the Activity Monitor Polling Rate property. The names of the noncritical applications that display at each point shift dynamically, as their activity level changes.

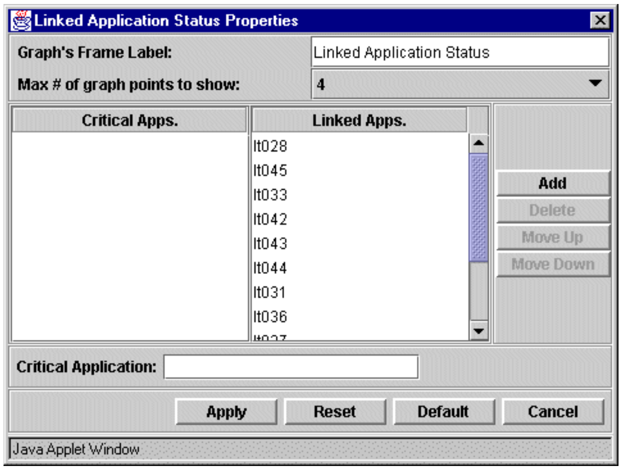
  The stacking bar at link graph points are always **green**, indicating the linked application is in a **Connected** phone line state. The line count of a linked application reverts to zero (0) when the main application is not linked to the application during a specific time period.

In summary, a graph's Properties determine the appearance and behavior of the graph. The Activity Monitor's Polling Rate property that determines the update interval. Therefore, linked application activity can best be displayed and interpreted by having a thorough understanding of the both the graph's and Activity Monitor's properties.

Refer to ***Linked Graph Properties*** on page 163.

## Linked Graph Properties

The display and behavior of the Linked Application Status Bar graph depends on the parameters defined at the Linked Graph Properties window. Each graph can be individually configured with an individual set of properties.



Graph's Frame Label: Linked Application Status

Max # of graph points to show: 4

Linked Apps.:
lt028
lt045
lt033
lt042
lt043
lt044
lt031
lt036

**To define Linked Graph Properties:**

- Launch the Monitor and graph a main application that has been assigned, started, and links to other applications during its execution cycle. (It is represented by a **green** application icon.) For additional information, see ***Linked Application Status Graph Display*** on page 159.
- Select the graph's Properties button to display the Linked Graph Properties window. You can customize a graph by defining the following properties.
- Graph's Frame Label:

  Define the name of the Graph's Frame Label. This label displays in the graph's title bar. The default label is `Activity Monitor`.
- Max # of Non-Permanent graph points to show: (10, 20, Number)

  This value determines the maximum number graph points at which non-permanent linked application activity can display. (Points #1 & #2 always display main application activity.)

The total number of linked applications that actually display is dependent upon a combination of factors. The applications that display at non-permanent graph points (if any) are determined by:

- the number graph points specified at this parameter.
- the number of critical applications specified at the Critical Application List (if any).
- the activity of the non-critical applications (if any).

Graph points are classified as non-permanent and permanent.

- Non-permanent points are occupied by linked applications beginning with the 3rd graph point, unless permanent graph points are defined for critical applications.

  If permanent graph points are defined, non-permanent linked applications display after the last permanent graph point. However, the total number of graph points will not exceed the number specified at this parameter, unless a greater number of critical applications have been defined. (In that case, no non-permanent applications display.)
  The names of linked applications display, dynamically, at non-permanent points in order of descending activity.

- Permanent points always display critical applications at specific graph points, beginning with the 3rd graph point. Permanent points are configured at the Critical Applications scrolling window.

  Non-permanent linked applications begin to display after the last critical application. However, the total number of graph points will not exceed the number specified at this parameter, unless a greater number of critical applications have been defined.

Because critical applications always display on a specific graph point, the actual number of linked applications that display can exceed the number you define at this prompt. The following examples illustrate the interaction between permanent and non-permanent points.

- If you select 10 and define no critical applications, the names of the ten most active linked applications display (in descending activity order) beginning at Point #3. A total of 12 graph points display.
- If you select 10 and define two critical applications, the two critical applications display (in a predefined order) beginning at Point #3. The names of the eight most active linked applications display (in descending activity order) at the remaining points, beginning at Points #5. A total of twelve points graph display.
- If you select 10 and define eleven critical applications, the eleven critical applications display play (in a predefined order) beginning at Point #3. No other linked applications display, because the value 10 was exceeded by the number of critical applications. A total of thirteen graph points display.

  Choose to show 10 points, 20 points, or a specific number of points as the maximum number of non-permanent graph points.

  - The default number of points is 10. If you select 10, the graph actually displays twelve points, as Point# 1 & Point #2 are always present.
  - The minimum number of points that you can define is 3. If you specify 3, Point #1 & Point #2 displays information about the main application. The 3rd point displays only the most active linked application, unless one critical application is defined. In that case, no non-permanent linked applications display.

  It is important to understand that the number of points you select to display affects the readability of the graph. Ten (10) is the default because a twelve point graph displays information in a comfortably readable format. Readability is indirectly proportional to the number of graph points. (Readability decreases as the number of graph points increase.)

  Ultimately, the maximum number of points displayed to the graph is dependent upon the number of critical applications and the value you specify at this prompt.

- Y Axis Representation: (Line Number, Percentage)

  Choose to express activity as either a percentage of phone lines or in absolute numbers of phone lines. This selection determines Y axis values.

  - Line Number: The Y axis expresses the actual number of phone lines on which applications are executing (currently in a **Connected** phone line state).
  - Percentage: The Y axis expresses the percentage of phone lines on which applications are executing (currently in a **Connected** phone line state).

- Critical Application List:

  This window displays the names of those linked applications that always display at specific graph points (beginning with Point #3), regardless of actual linking activity. On the graph, critical applications are labeled `Critical` not `Link`. The term *critical application* refers to an application that is linked to, from a main application, and is always present on a linked application status graph.

  You can specify any number of critical applications. They display in the order in which they are listed in the scrolling window. The number of critical applications affect the number of linked applications that display at non-permanent graph points. By default, no critical applications are defined.

  In this example, the linked application `lt025` is defined as a critical application. It is the only critical application. It displays at Point #3 and is labeled `Critical` not `Link`. The 8 other visible graph points display the names of 8 most active non-permanent linked applications, beginning with Point #4, in order of descending activity.

**To define a critical application:**

- Type the name of linked application that is designated as critical.
- Select Edit to display the Edit Critical Applications menu and choose Add, Remove, Select, or Move.

  Add: Choose Add and select Bottom, Top, Before, or After to add the name of the application to a specific location on the Critical Application List.

  Delete: Choose Remove to remove Selected or All applications from the Critical Application List. This allows for quick removal of application names. Remove only clears the window of data. The application itself remains unaltered.

  Move Up or Down:Choose Move to reorder the applications in the Critical Application List. Critical applications display on the graph, beginning with Point #3, based on the order in which applications are listed in this window. To reorder applications, select one or more applications and choose Up or Down.

  Up: Scroll with the <RIGHT> mouse button move the selected application(s) up one position on the list.

  Down: Scroll with the <RIGHT> mouse button to move the selected application(s) down one position on the list.

- Once all properties are defined for this graph, select Apply, Reset, or Defaults.

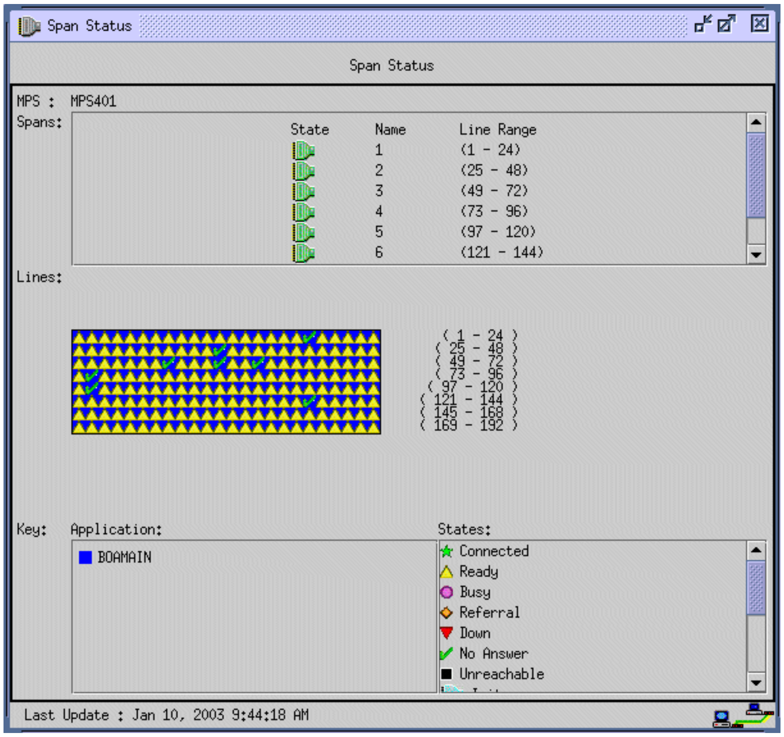
Apply: Applies the properties to the Linked Application Status Bar graph.

Reset: Restores the listing to the state after the last occurrence of selecting Apply.

Defaults: Resets the window to the default. Choose Apply to apply the settings to the graph.

## Component Span Status

Use the Component Span Status tool to display the state of digital spans (physical phone lines), graphically, on a per component basis. Span Status is available for each component defined for the domain in the Activity Monitor’s workspace. This is a display tool only. You can not initiate activity with this tool.



MPS : MPS401

Spans:

| State | Name | Line Range |
|---|---|---|
| | 1 | (1 - 24) |
| | 2 | (25 - 48) |
| | 3 | (49 - 72) |
| | 4 | (73 - 96) |
| | 5 | (97 - 120) |
| | 6 | (121 - 144) |

Lines:

( 1 - 24 )
( 25 - 48 )
( 49 - 72 )
( 73 - 96 )
( 97 - 120 )
( 121 - 144 )
( 145 - 168 )
( 169 - 192 )

Key: Application:

■ BOAMAIN

States:

★ Connected
△ Ready
● Busy
◆ Referral
▼ Down
✓ No Answer
■ Unreachable

Last Update : Jan 10, 2003 9:44:18 AM

You can launch Span Status for a single component, multiple selected components, a single span, or multiple selected spans. A Span Status window opens for each component/span that you select. The information applies to digital phone lines only and is available for components with either all digital lines, or a combination of digital and analog lines. However, the information does not apply to a component’s analog phone lines.

Span status is updated, by default, at 15 second intervals. This interval is specified by the PeriView Data Provider software.

You can also display span status information with the VSH and PeriReporter Tools. To display span status with PeriReporter Tools, refer to the *PeriReporter Reference Guide*.

Span status displays only for (digital) physical phone (call processing) lines, which are capable of process calls. Span status does not display for logical (administrative) phone lines, which are unable to process calls and to which administrative applications are, typically, assigned. Therefore, administrative applications are not listed in the Applications scrolling window, unless they are assigned to physical lines, which are digital.

Component Span Status displays the component name and state; the name of the spans (`A`, `B`, `C`, etc.) and their states; and the phone lines and applications that are associated with each span.

Span dividers are lines that identify the boundaries between individual spans in the Lines display area. When you position the cursor over a line, the phone line number displays under the Lines display area.

The date and time of the last update of information to this window displays in the lower left corner of the Component Span Status window.

## Component Span Status Information

The Component Span Status tool displays the following information.

- **Component:**

  The node name and component number of the component used to launch the Component Span Status tool displays in the format `nodename:comp_number`. In this example, `is9501:101` (MPS `101` on node `is9501`) was used to launch the tool. The current state of the component (**Up**, **Down**, **Unreachable**) is identified by the color coded symbols defined in Key area of the window, labeled States.

  When you launch Component Spans status with a component configured only with analog phone lines, the Span Status window indicates some information about the component. However, the message in the Spans display area indicates that no spans have been detected. In the following illustration, the Span Status tool was launched with an analog MPS (`is7501:1`).

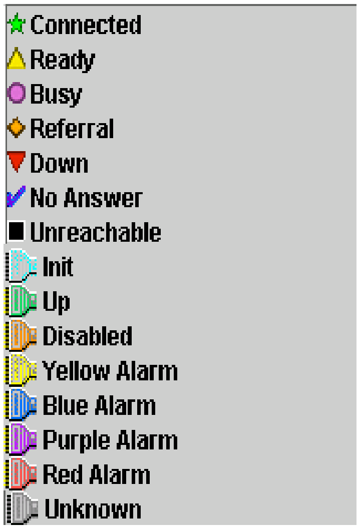
- **Spans:**

  Span information indicates the span state, span name, and phone line range associated with the span. The current state of the span (Red Alarm, Purple Alarm, Blue Alarm, Yellow Alarm, Unreachable, Up, Disabled, Unknown) is identified by the color coded symbols defined in Key area of the window, labeled States.

- **Lines:**

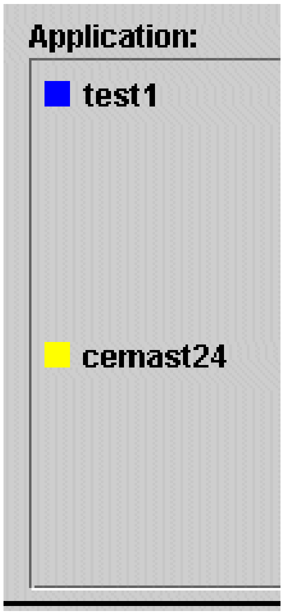
  The Lines display area identifies information about the spans that are associated with phone lines. Span dividers are the black lines that define the boundaries between the individual spans. When the cursor is over an line, the line number displays under the Lines display area.

  The current phone line state is indicated by the color coded symbols defined in Key area of the window and labeled States.



★ Connected
△ Ready
● Busy
◆ Referral
▼ Down
✓ No Answer
■ Unreachable
Init
Up
Disabled
Yellow Alarm
Blue Alarm
Purple Alarm
Red Alarm
Unknown

The applications associated with a line (if any) are also identified by color coded symbols defined in the Key area of the window, labeled Applications.



Application:

🟦 test1

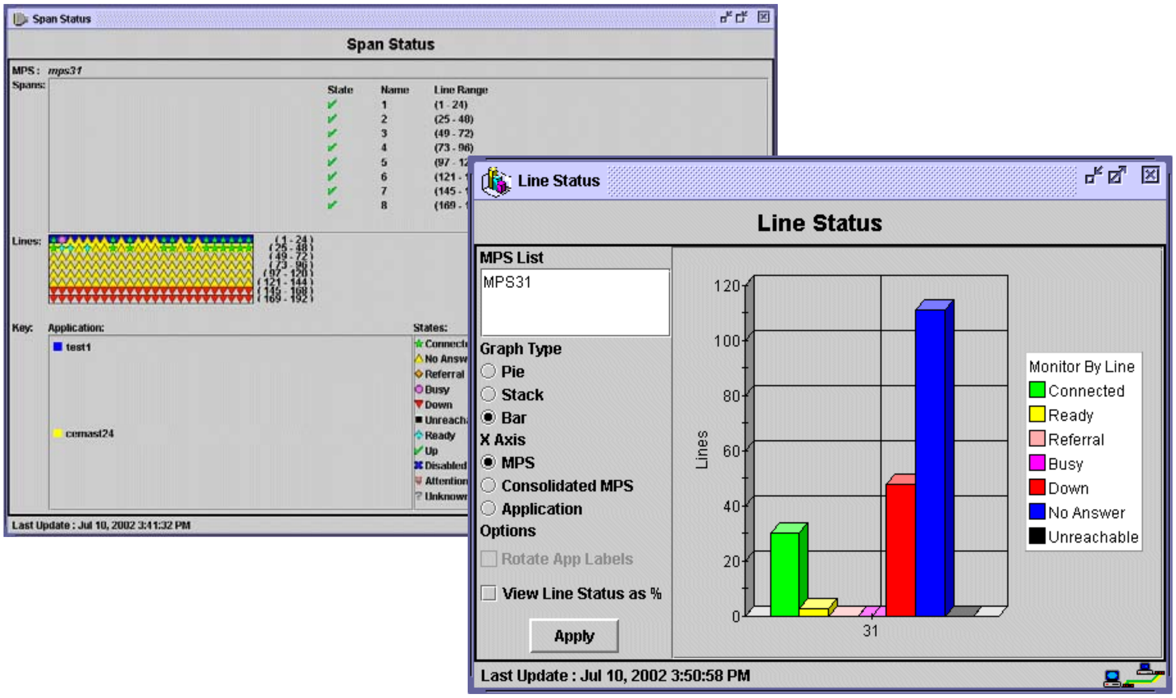
🟨 cemast24

The information displayed in the Lines display area should correspond to the Phone Line Status Bar graphs. When the Span Status window and bar graph are launched for the same component, sequentially, the state of each of the lines should be consistent between the displays.

In the following example, MPS31 launched both the Span Status window and the Phone Line Status bar graph. The color coded states indicate that the amount of lines/per state is consistent in each of these displays.

- **Key:**

  The Key display area is used to associate the color coded symbols for Applications and States with the Span Status display.



Span Status

MPS : *mps31*

Spans:

| State | Name | Line Range |
|---|---|---|
| ✓ | 1 | (1 - 24) |
| ✓ | 2 | (25 - 48) |
| ✓ | 3 | (49 - 72) |
| ✓ | 4 | (73 - 96) |
| ✓ | 5 | (97 - 12 |
| ✓ | 6 | (121 - 1 |
| ✓ | 7 | (145 - 1 |
| ✓ | 8 | (169 - 1 |

Lines: ( 1 - 24 ) ( 25 - 48 ) ( 49 - 72 ) ( 73 - 96 ) ( 97 - 120 ) ( 121 - 144 ) ( 145 - 168 ) ( 169 - 192 )

Key: Application:

- 🟦 test1
- 🟨 cemast24

States: Connect… No Answ… Referral Busy Down Unreach… Ready Up Disabled Attention Unknow…

Last Update : Jul 10, 2002 3:41:32 PM

Line Status

MPS List: MPS31

Graph Type
○ Pie
○ Stack
● Bar

X Axis
● MPS
○ Consolidated MPS
○ Application

Options
□ Rotate App Labels
□ View Line Status as %

Apply

Last Update : Jul 10, 2002 3:50:58 PM

- Applications:

  The Applications display scrolling window identifies all applications (if any) that have been assigned to the component. Each application is associated with a specific color. Each line to which an application is assigned displays with a colored background, which matches one of the application colors displayed in the Applications scrolling window. The application names and the phone lines to which they are assigned can be identified by matching the color sets.

  ☞ Because span status displays only for (digital) physical phone lines, administrative applications are not listed in the Applications scrolling window, unless they are assigned to (digital) physical lines.

- States:

  The States display scrolling window identifies the range of possible component, Span, and Phone Line states. These symbols are used to indicate the current state of the component, each span, and each of the digital, physical phone lines associated with the spans in the Lines display area. Phone Line, Span, and component states are defined in the following table. For additional information about phone line states, see ***Phone Line Status*** on page 150.

**Component Span Status States** *Sheet 1 of 2*

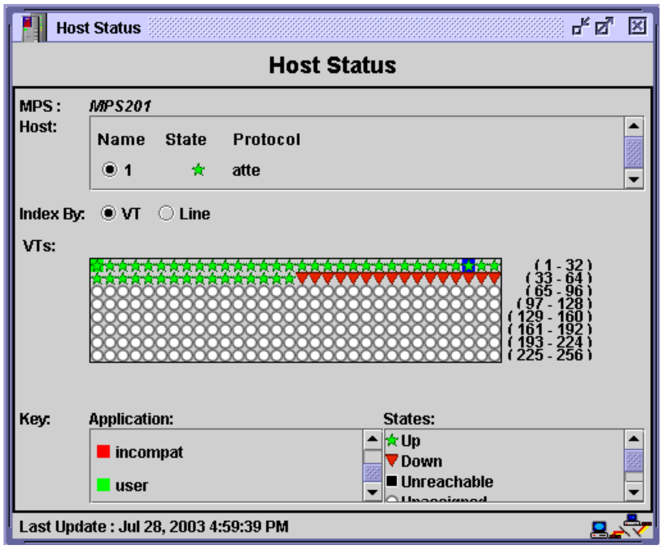
| Symbol | State | Applies To | Description |
|---|---|---|---|
| ★ | Connected | Phone Line | Phone line state in which interaction is detected between the MPS phone lines and callers, indicating that calls are in process on these lines. |
| ▲ | No Answer | Phone Line | The line is Idle and the state is set to no answer. |
| ◆ | Referral | Phone Line | Detected activity is dependent upon the type of referral method that has been instituted (hook flash or digital). Refer to ***Phone Line Status*** on page 150. |
| ● | Busy | Phone Line | Phone line state in which the MPS phone lines are in an in-service-busy state and not able to take calls. |
| ▼ | Down | MPS | One or more component-specific processes have either been interrupted or are not yet fully operational. |
| | | Phone Line | Phone line state in which the MPS or MPS phone lines are not able to receive calls. |
| ■ | Unreachable | Span | The state of the span is unknown because the span is unreachable. |
| | | MPS | The state of the MPS is unknown. No information is available. Once information is available, the state of the MPS is either **Down** or **Up**. |
| | | Phone Line | Phone line state in which the MPS cannot be contacted therefore, phone line state cannot be determined. |
| ✦ | Ready | Phone Line | Phone line state in which the MPS phone lines are in service and ready to take calls. |
| ✓ | Up | Span | The Span is in service. |
| | | MPS | All MPS-specific processes are fully operational. |
| ✖ | Disabled | Span | The span has been intentionally disabled from the MPS. |

**Component Span Status States** *Sheet 2 of 2*

| Symbol | State | Applies To | Description |
|---|---|---|---|
| 🟨 | Yellow Alarm | Span | The span is in a yellow alarm state. The span is receiving a yellow alarm from the remote end.<br>This indicates that the far end is not able to receive your signal but you are receiving a signal from the remote end.<br>The span requires attention. |
| 🟥 | Red Alarm | Span | The span is in a red alarm state, which indicates that the span is *out of sync*.<br>A red alarm indicates the span has lost the ability to synchronize with the remote equipment. The span has, effectively, lost the incoming signal.<br>The span requires attention. |
| 🔵 | Blue Alarm | Span | The span is in a blue alarm state. The span is receiving a blue alarm from the remote end. This means you are receiving a pattern of all ones.<br>Typically, a blue alarm indicates that the remote end is in a maintenance mode. |
| 🟣 | Purple Alarm | Span | The span is in a purple alarm state. The span is receiving a purple alarm from the remote end. This means you are receiving a pattern of all ones on channel 16).<br>Typically, a purple alarm indicates that the remote end is in a maintenance mode. |
| ? | Unknown | Span | The state of the span is unrecognized. It does not comply with the definition of any other State listed in this scrolling window. |

## Component Host Status

Use the Component Host Status tool to display host status information, on a per component basis, for each component defined for the domain in the Activity Monitor's workspace. You can select to display host status based on either the VT number or the phone line number, with which the VT is associated. This is a display tool only. You can not initiate activity with this tool.



Host Status

**Host Status**

MPS : *MPS201*

Host:

| Name | State | Protocol |
|---|---|---|
| ● 1 | ★ | atte |

Index By: ● VT ○ Line

VTs:

Key: Application:

🟥 incompat

🟩 user

States:

★ Up

▼ Down

■ Unreachable

○ Unassigned

Last Update : Jul 28, 2003 4:59:39 PM

You can launch Host status for a single component or for multiply selected components. A Host Status window opens for each component you select and displays the status of all hosts with which the component communicates.

Host status is updated, at a pre-determined time-interval. This interval is set in the PeriView Data Provider configuration file.

Component Host Status displays the name and state of the component used to launch the tool. For each host, the host name, state, and protocol is identified. You can select to display host status by either VT or Line to obtain state and application information. When the cursor is over a VT or Line, the VT or Line number displays under the VT/Lines display area. The date and time of the last update of information to this window displays in the lower left corner of the Component Host Status window.

When you launch the Component Host Status tool with a component that is not associated with a host, you see the message `No hosts` at the Hosts parameter.

The COMMGR (Communications Manager) process enables application programs to communicate with external host computers, using a range of protocols. A host’s VTs are either associated directly with a component’s phone lines or are pooled and made available to phone lines. This information resides in the COMMGR’s configuration file `$MPSHOME/componentN/etc/commgr.cfg`.

Applications, which are assigned to specific phone lines on an MPS, are associated with a specific host’s VT numbers in the `commgr.cfg` file.VT/ Line status identifies the application (if any) associated with the phone line that is configured for a host’s VT.

For information about the COMMGR process or its configuration file `commgr.cfg`, refer to the *System Configuration Reference Manual*. Host communication functions and protocols are documented in the *Communication Configuration Reference Manual*. `COMMGR` commands are also individually documented on Solaris man pages, which are accessible from a VSH command line.

Type **`vpsman commgr intro`** to display the man page that provides an overview of the `COMMGR` commands

- **Type `vpsman commgr status` to display the man page that documents the `commgr status` command.**

You can also display host status information with the VSH and PeriReporter Tools. To display span status with PeriReporter Tools, refer to the *PeriReporter User s Guide*.

## Component Host Status Information

Component Host status information is displayed on a per component basis. Once the status window opens, information about all hosts to which the component (that was used to launch this tool communicates) is available. To display information for a specific host, select the host in the Hosts display area. Component Host status information includes the following:

- **Component:**

  The node name and component number of the component used to launch the Component Host Status tool displays in the format `nodename:comp_number`. In this example, `is4:4` (MPS `4` on node `is4`) was used to launch the tool. The current state of the component (**Up**, **Down**, **Unreachable**) is identified by the color coded symbols defined in Key area of the window, labeled States.

- **Hosts:**

  The hosts display area identifies all hosts with which the component communicates. For each host, the host name, state, and protocol are defined. The current state of the host (**Up**, **Down**, **Unreachable**) is identified by the color coded symbols defined in Key area of the window and labeled States. Information about the VTs/Lines configured for the selected host, displays in the Lines area.

- **Index by VT/Line:**

  You can select to display host status based on the VT number or the phone line number with which the VT is associated. Select VT to display status based on VT number. Select Line to display status based on the phone line number associated with the VT.

- **VT/Lines:**

  The VT/Lines display area identifies information about the state of individual VT's or phone lines. If VT was selected at the previous prompt, VTs display in this area. If Line was selected at the previous prompt, phone lines display in this area.

  When the cursor is over a VT or Line, the VT number or line number displays under this display area. The current state of the VT/Line (Up, Down, Unreachable, Unassigned VT) is identified by the color coded symbols defined in Key area of the window and labeled States. The applications associated with a VT/Line (if any) are also identified by color coded symbols defined in the Key area of the window, labeled Applications.

  The relationship between a component's phone lines and a host's VTs are defined in the `commgr.cfg` configuration file, which resides in the following locations:

  Solaris: `$MPSHOME/component_typeN/etc/commgr.cfg`

  Windows 2000:
  `%MPSHOME%\component_typeN\etc\info\commgr.cfg`

- **Applications:**

  The Applications display scrolling window identifies all applications (if any) that are assigned to the component, regardless of which host is selected. Each application is associated with a specific color. Each VT or line to which an application is assigned, displays with a color coded background. To identify the application, match the color to one of the application colors displayed in the Applications scrolling window. The applications names and the phone lines to which they are assigned can be easily identified by matching color sets.

- **States:**

  The States display scrolling window identifies the range of possible component, Host, and VT/Line states. These symbols are used to indicate the current state of the component, each host in the Component Host Status window, and each of the VTs/Lines in the VT/Line display area. Each of these states are defined in the following table.

**Component Host Status States** *Sheet 1 of 2*

| Symbol | State | Applies To | Description |
|---|---|---|---|
| ✓ | Up | MPS | All component-specific processes are fully operational. |
| | | Host | Protocol software has determined that the remote host is available for communication. |
| | | VT | Protocol software has determined that a given VT can be used to establish a session with the remote host. |
| ▼ | Down | MPS | One or more component-specific processes are not fully operational. |
| | | Host | Protocol software has determined that the remote host is not available for communication. |
| | | VT | Protocol software has determined that a given VT can not be used to establish a session with the remote host. |
| | | Phone Line | Phone Line state in which the MPS phone lines are not able to receive calls. |
| ■ | Unreachable | MPS | The state of the component is unknown. No information is available. Once information is available, the state of the component is either **Down** or **Up**. |
| | | Host | The state of the host is not known, as it is unreachable. |
| | | VT | The state of the VT is not known, as it is unreachable. |
| | | Phone Line | Phone line state in which the MPS cannot be contacted therefore, phone line state cannot be determined. |

**Component Host Status States** *Sheet 2 of 2*

| Symbol | State | Applies To | Description |
|---|---|---|---|
| ○ | Unassigned VT | VT | The phone line is not currently associated with a VT. However, at some other point in time it can be associated with a VT as a result of pooling. |
| ? | Unknown | Span | The state of the host is unrecognized. It does not comply with the definition of any other State listed in this scrolling window. |

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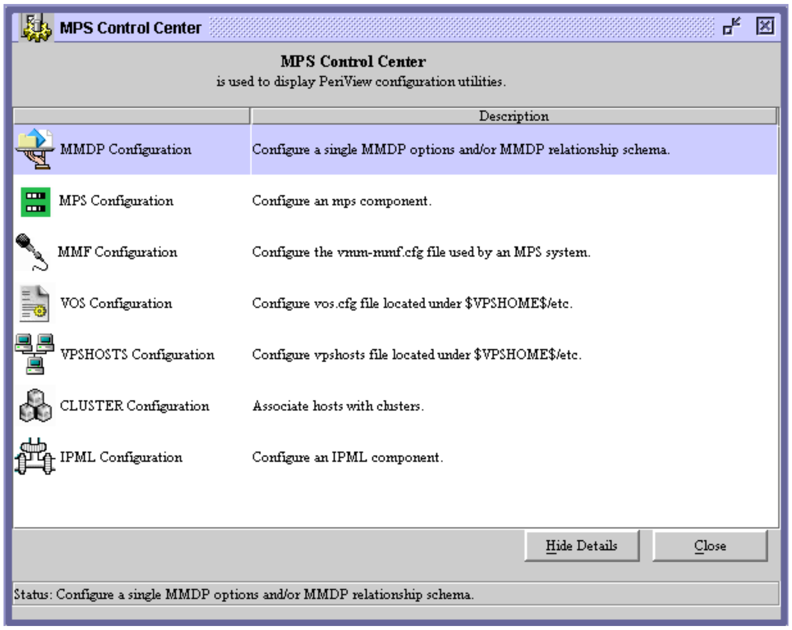
6

# MPS Control Center

This chapter covers:

1. Introduction to MPS Control Center
2. MMDP Configuration
3. MPS Configuration
4. MMF Configuration
5. VOS Configuration
6. VpsHosts Configuration
7. Cluster Configuration
8. IPML Configuration
9. Telephony Link Server
10. SCCS Host Data Exchange
11. TAPI Server Connection

## Introduction to MPS Control Center



**MPS Control Center**
is used to display PeriView configuration utilities.

| | Description |
|---|---|
| MMDP Configuration | Configure a single MMDP options and/or MMDP relationship schema. |
| MPS Configuration | Configure an mps component. |
| MMF Configuration | Configure the vmm-mmf.cfg file used by an MPS system. |
| VOS Configuration | Configure vos.cfg file located under $VPSHOME$/etc. |
| VPSHOSTS Configuration | Configure vpshosts file located under $VPSHOME$/etc. |
| CLUSTER Configuration | Associate hosts with clusters. |
| IPML Configuration | Configure an IPML component. |

Status: Configure a single MMDP options and/or MMDP relationship schema.

The user must have administrative rights in order to access the MPS Control Center.

The MPS Control Center is made up of seven tools.

- MMDP Configuration
- MPS Configuration
- MMF Configuration
- VOS Configuration
- VPSHOSTS Configuration
- CLUSTER Configuration
- IPML Configuration

## MMDP Configuration

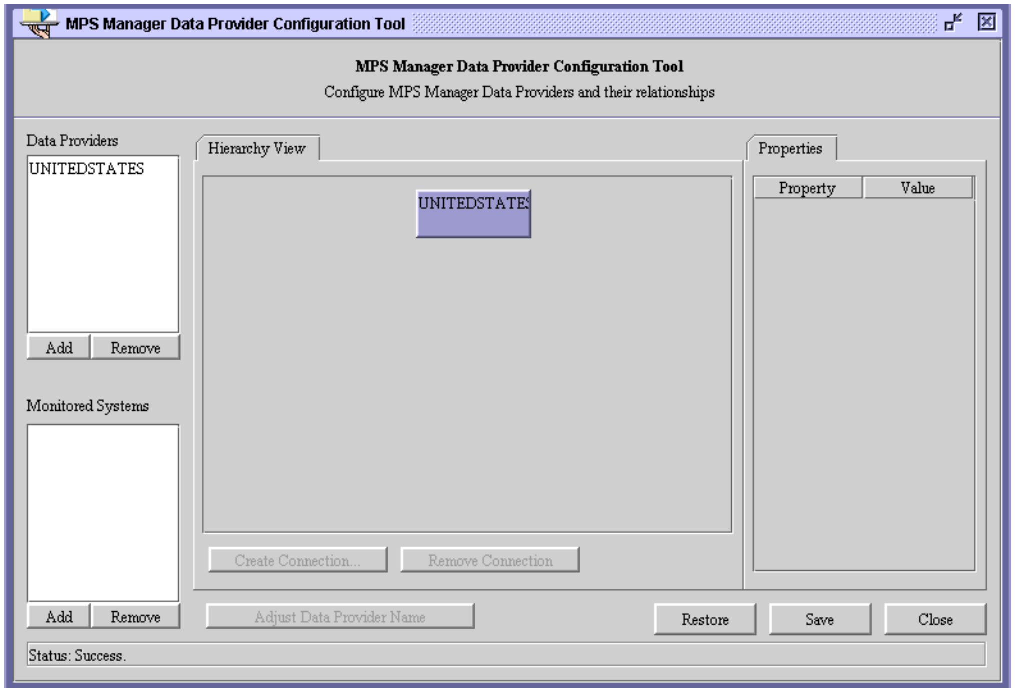
The MPS Manager Data Provider (MMDP) is the single provider of data to the PeriView. The MMDP Configurator allows you to configure the Data Providers for PeriView.

This section covers the following topics:

- Launching the MMDP Configuration Tool
- Adding a Data Provider
- Removing Data Provider
- Create a Data Provider Connection
- Remove a Data Provider Connection
- Adding Monitored System
- Removing Monitored System

### Launching the MMDP Configuration Tool

The `MMDP Configuration` tool allows you to configure the MPS Manager Data Providers and their relationships. To launch the MMDP Configurator, double click on the `MMDP Configuration` option in the MPS Control Center screen. The following screen appears:



MPS Manager Data Provider Configuration Tool

**MPS Manager Data Provider Configuration Tool**

Configure MPS Manager Data Providers and their relationships

Data Providers: UNITEDSTATES

Status: Success.

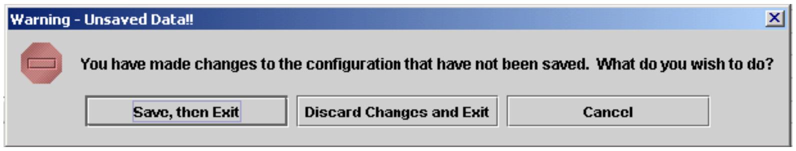
By default, the MMDP Configuration screen opens with a single MMDP (which is the local host). In the GUI displayed above, the MMDP runs on the NAGARATNA host. Note that no other MMDP is configured on this host.

### MMDP Configurator—Action Buttons

The MMDP Configuration screen displays three action buttons, namely,

- RESTORE—Clicking the RESTORE button restores the last known saved configuration.
- SAVE—The SAVE button causes the current configuration to be distributed to all configured (on screen) Data Providers.
- CLOSE—The CLOSE button exits the utility.

If a user closes the screen by either clicking on CLOSE or by clicking on X, a warning pop-up screen appears as follows:



Warning - Unsaved Data!!

You have made changes to the configuration that have not been saved. What do you wish to do?

The Warning message displays three buttons namely,

- SAVE, THEN EXIT—Clicking this button causes the current configuration to be distributed to all configured (on screen) Data Providers.
- DISCARD CHANGES AND EXIT—Clicking this button closes the MMDP Configurator screen without saving the changes.
- CANCEL—Clicking this button cancels the operation and returns to the MMDP Configurator screen.

## Adding a Data Provider

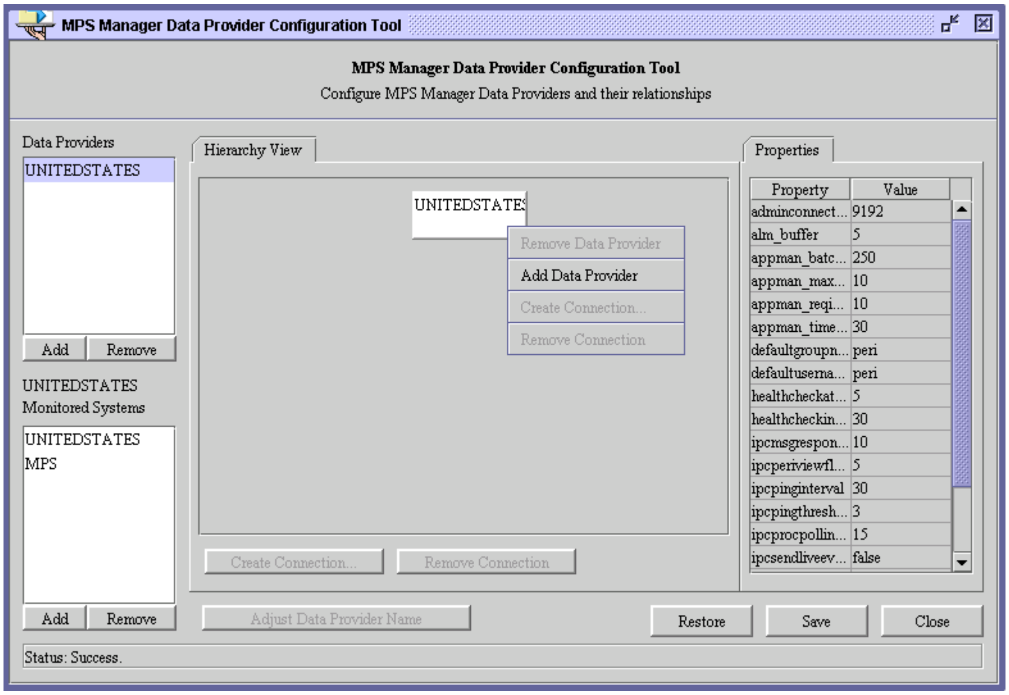
PeriView supports two types of Data Providers:

- Consolidator Data Provider
- Service Data Provider

### Adding a Consolidator Data Provider

To add a Consolidator Data Provider, proceed as follows:

1. Launch the MMDP configuration tool. Right click on the parent Data Provider.



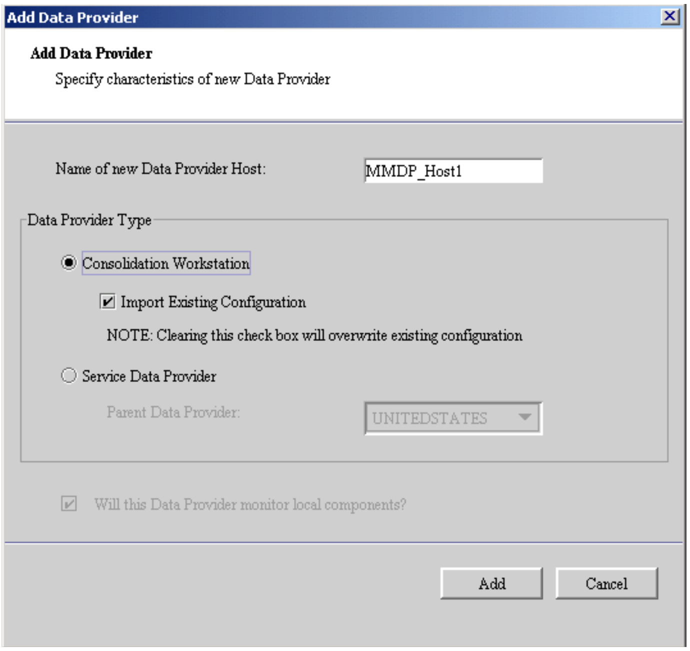
| Property | Value |
|---|---|
| adminconnect... | 9192 |
| alm_buffer | 5 |
| appman_batc... | 250 |
| appman_max... | 10 |
| appman_reqi... | 10 |
| appman_time... | 30 |
| defaultgroupn... | peri |
| defaultuserna... | peri |
| healthcheckat... | 5 |
| healthcheckin... | 30 |
| ipcmsgrespon... | 10 |
| ipcperiviewfl... | 5 |
| ipcpinginterval | 30 |
| ipcpingthresh... | 3 |
| ipcprocpollin... | 15 |
| ipcsendliveev... | false |

Status: Success.

2. Select the ADD DATA PROVIDER menu option, the following screen appears.

You can also launch the `Add Data provider` screen by clicking on the ADD button under the first list on the left hand side of the `MMDP Configuration tool` screen. Note that all the screens corresponding to the functionalities available with the MMDP Configurator can be launched either by right clicking on the Data Provider or by clicking the respective buttons.

This is true for the Remove Data Provider, Add Monitored System, Remove Monitored System, Create a Data Provider Connection, Remove Data Provider Connection functionalities.



Add Data Provider

**Add Data Provider**

Specify characteristics of new Data Provider

Name of new Data Provider Host: MMDP_Host1

Data Provider Type

● Consolidation Workstation

☑ Import Existing Configuration

NOTE: Clearing this check box will overwrite existing configuration

○ Service Data Provider

Parent Data Provider: UNITEDSTATES

☑ Will this Data Provider monitor local components?

3. Choose the `Consolidation Workstation` radio button to add the Consolidator Data Provider.

4. Check the `Import Existing Configuration` checkbox, if you need to support data replication on multiple consolidators.

If you do not check the `Import Existing Configuration` checkbox, clicking on the Add button will rewrite the currently existing configuration data on a newly added consolidator with the default configuration data.

5. Modify the parameters in the screen as required.

**Detailed Description of the Add Data Provider screen**

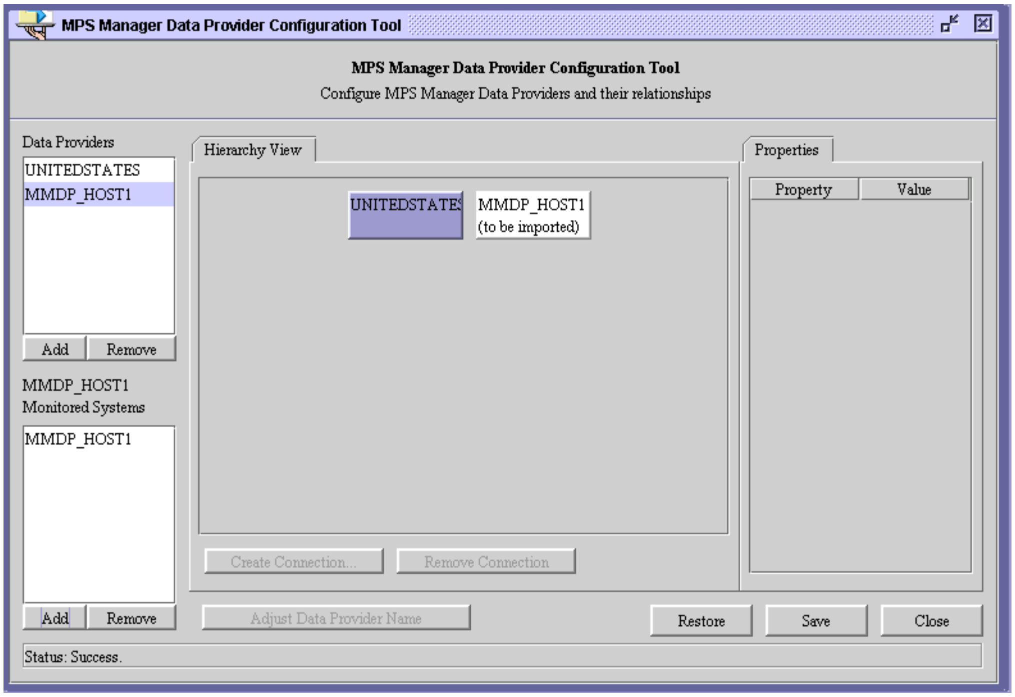
Name of new Data Provider Host—Allows you to enter a name for the new Data Provider that is being created.

Data Provider Type—Allows to choose between Consolidator and Service Data Provider types.

Add—Clicking on this button adds the new MMDP host to the list of Data Providers present in the system.

Cancel—Clicking on this button, cancels the operation and returns to the `MMDP Configuration tool` screen.

6. Click on the ADD button, to add the new Consolidator MMDP to the list of Data Providers. The following screen appears with the consolidator MMDP displayed in the list of the Data Providers.

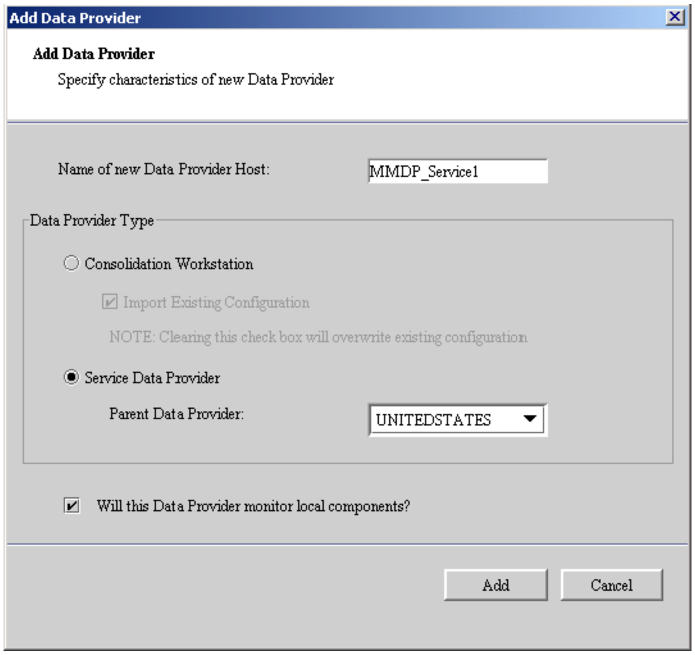


Status: Success.

### Adding a Service Data Provider

To add a Service Data Provider, proceed as follows:

1. Repeat step 1 and step 2 from the Adding a Consolidator Data Provider section.



Add Data Provider

Add Data Provider

Specify characteristics of new Data Provider

Name of new Data Provider Host: MMDP_Service1

Data Provider Type

○ Consolidation Workstation

☑ Import Existing Configuration

NOTE: Clearing this check box will overwrite existing configuration

● Service Data Provider

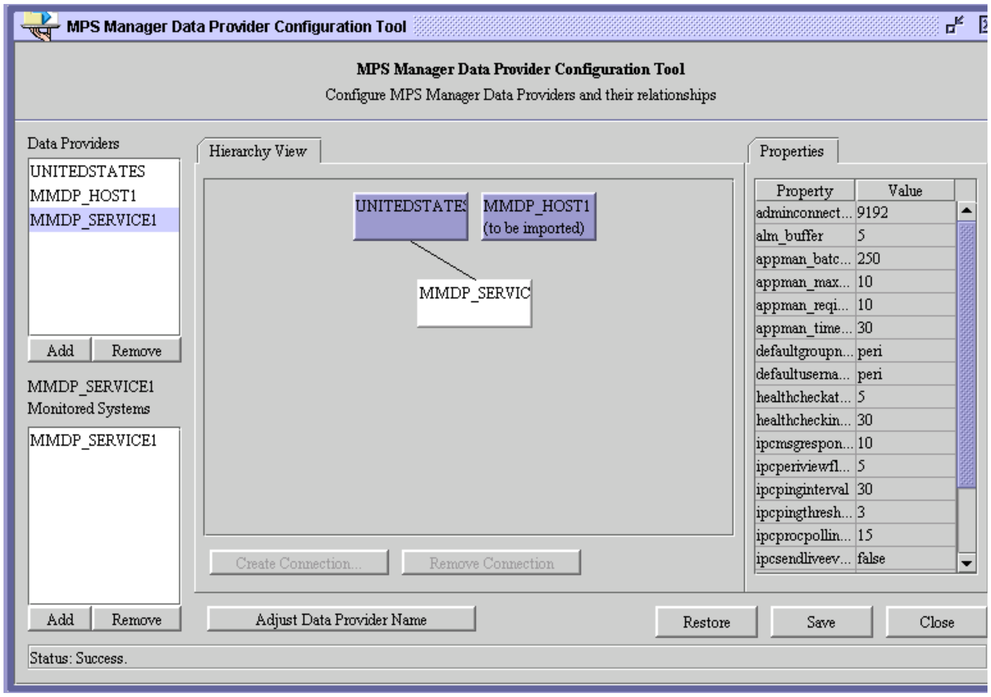
Parent Data Provider: UNITEDSTATES

☑ Will this Data Provider monitor local components?

2. Choose the `Service Data Provider` radio button to add the Service Data Provider. Select the parent MMDP for the service MMDP from the dropdown list.

3. Modify the parameters as required. Refer the Detailed Description of the Add Data Provider screen section for more details.

4. Click on the ADD button under the first list on the left hand side, to add the new Service MMDP to the list of Data Providers. The following screen appears with the Service MMDP displayed in the list of Data Providers.



MPS Manager Data Provider Configuration Tool

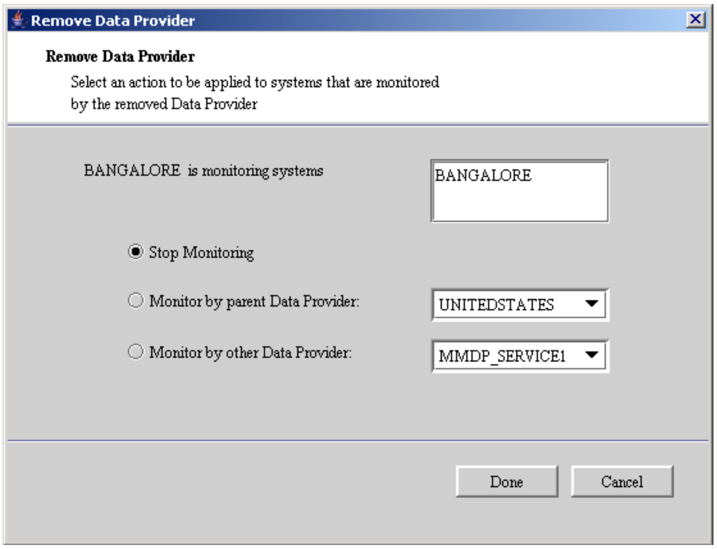
Configure MPS Manager Data Providers and their relationships

| Property | Value |
|---|---|
| adminconnect... | 9192 |
| alm_buffer | 5 |
| appman_batc... | 250 |
| appman_max... | 10 |
| appman_reqi... | 10 |
| appman_time... | 30 |
| defaultgroupn... | peri |
| defaultusema... | peri |
| healthcheckat... | 5 |
| healthcheckin... | 30 |
| ipcmsgrespon... | 10 |
| ipcperiviewfl... | 5 |
| ipcpinginterval | 30 |
| ipcpingthresh... | 3 |
| ipcprocpollin... | 15 |
| ipcsendliveev... | false |

Status: Success.

## Removing Data Provider

To remove a Data Provider from the Data Provider's list, click on the REMOVE button under the first list on the left hand side. The following screen appears:



Remove Data Provider

**Remove Data Provider**

Select an action to be applied to systems that are monitored by the removed Data Provider

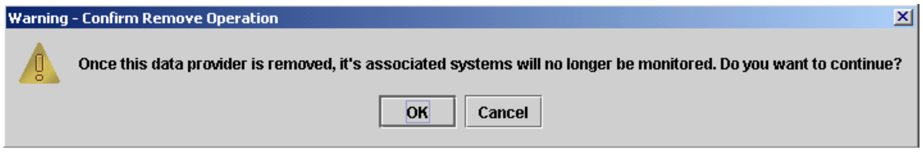
BANGALORE is monitoring systems: BANGALORE

● Stop Monitoring

○ Monitor by parent Data Provider: UNITEDSTATES

○ Monitor by other Data Provider: MMDP_SERVICE1

1. To remove the Data Provider from the list, click on DONE. A pop up window appears with the warning message displayed as follows,



Warning - Confirm Remove Operation

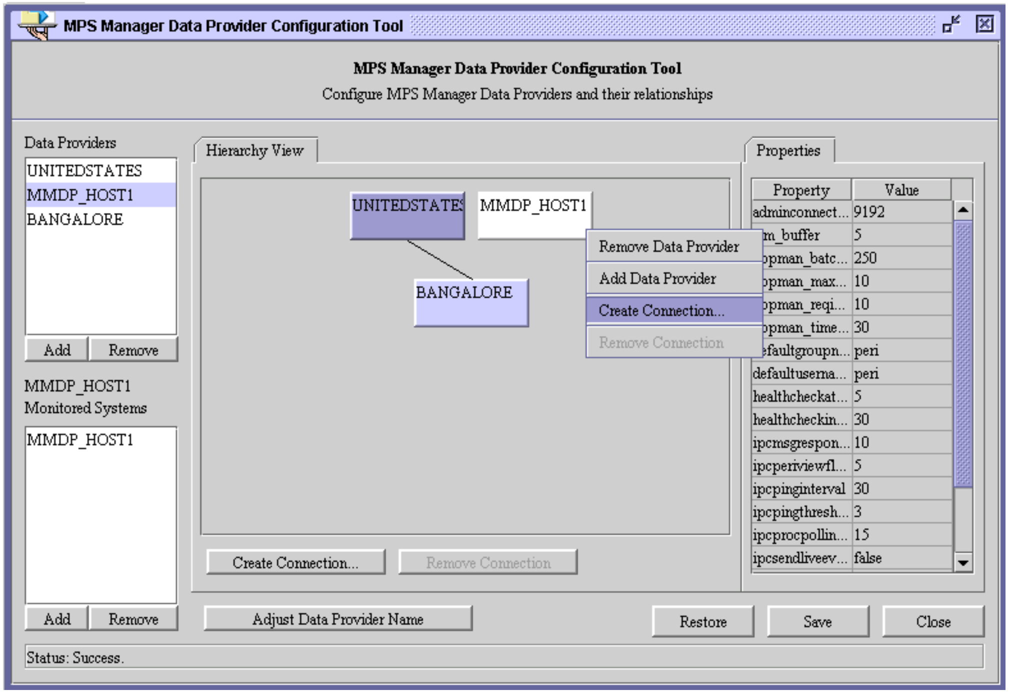
Once this data provider is removed, it's associated systems will no longer be monitored. Do you want to continue?

2. Click on OK to remove the Data Provider.

## Create a Data Provider Connection

The MMDP Configuration tool allows you to create a connection between the existing Data Providers. To create a data provider connection, proceed as follows:

1. Launch the MMDP configuration tool. Right click on any Data Provider.



**MPS Manager Data Provider Configuration Tool**

Configure MPS Manager Data Providers and their relationships

Data Providers

UNITEDSTATES
MMDP_HOST1
BANGALORE

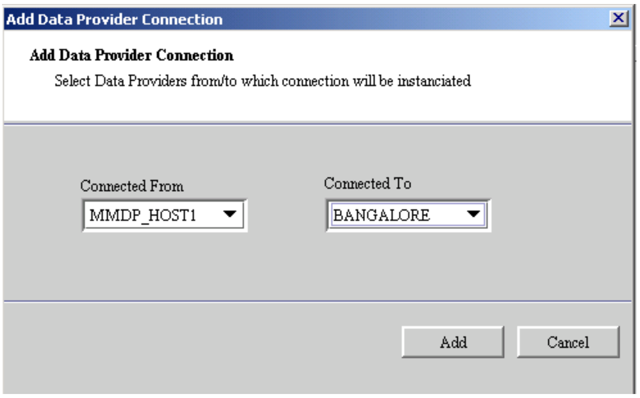
MMDP_HOST1
Monitored Systems

MMDP_HOST1

| Property | Value |
|---|---|
| adminconnect... | 9192 |
| m_buffer | 5 |
| pman_batc... | 250 |
| pman_max... | 10 |
| pman_reqi... | 10 |
| pman_time... | 30 |
| efaultgroupn... | peri |
| defaultusema... | peri |
| healthcheckat... | 5 |
| healthcheckin... | 30 |
| ipcmsgrespon... | 10 |
| ipcperiviewfl... | 5 |
| ipcpinginterval | 30 |
| ipcpingthresh... | 3 |
| ipcprocpollin... | 15 |
| ipcsendliveev... | false |

Status: Success.

2. To create a connection, choose the `Create Connection` menu option. The following screen appears:



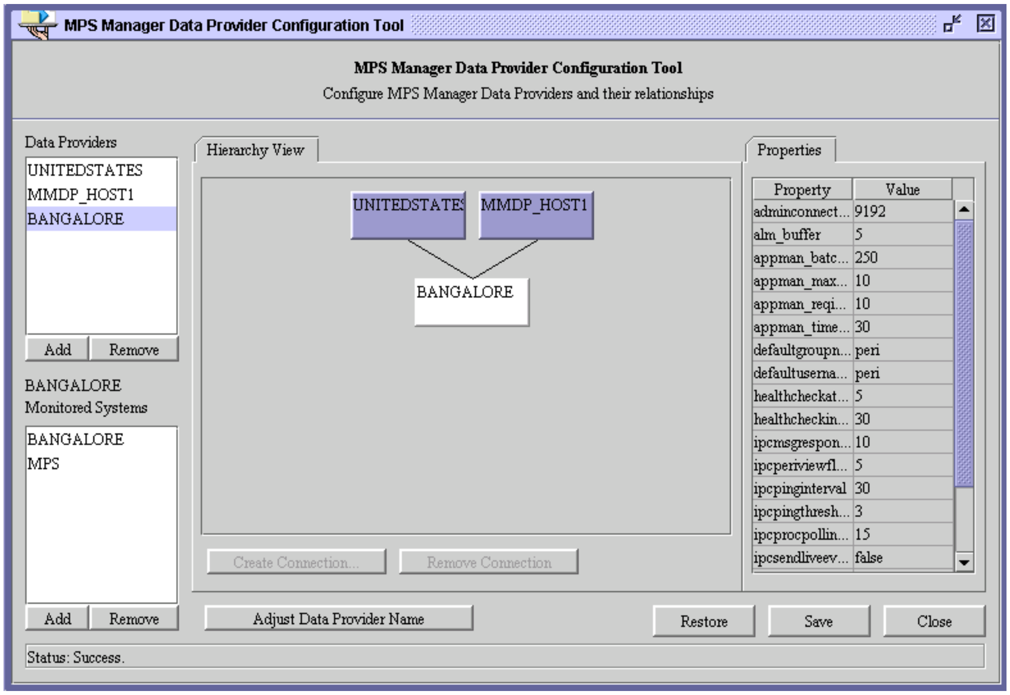
**Add Data Provider Connection**

Select Data Providers from/to which connection will be instanciated

Connected From: MMDP_HOST1

Connected To: BANGALORE

3. Select the parent (`Connect From`) and child (`Connect To`) Data Providers to create the connection. Clicking on the Add button, establishes the connection between the two Data Providers as shown below.



**MPS Manager Data Provider Configuration Tool**

Configure MPS Manager Data Providers and their relationships

Data Providers

UNITEDSTATES
MMDP_HOST1
BANGALORE

BANGALORE
Monitored Systems

BANGALORE
MPS

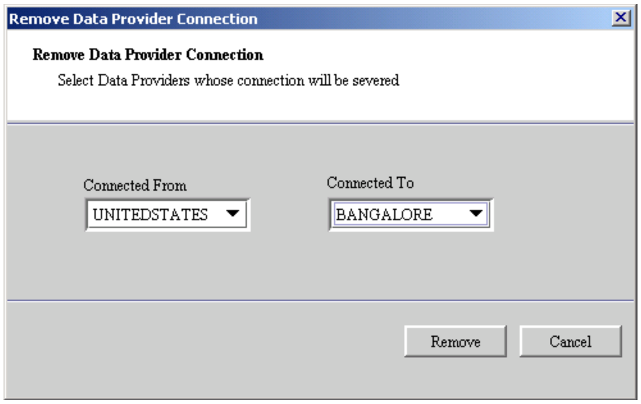
| Property | Value |
|---|---|
| adminconnect... | 9192 |
| alm_buffer | 5 |
| appman_batc... | 250 |
| appman_max... | 10 |
| appman_reqi... | 10 |
| appman_time... | 30 |
| defaultgroupn... | peri |
| defaultuserna... | peri |
| healthcheckat... | 5 |
| healthcheckin... | 30 |
| ipcmsgrespon... | 10 |
| ipcperiviewfl... | 5 |
| ipcpinginterval | 30 |
| ipcpingthresh... | 3 |
| ipcprocpollin... | 15 |
| ipcsendliveev... | false |

Status: Success.

When you select a Data Provider from the Data Provider's list, the properties and the respective values of these properties are displayed on the right hand side of the screen. You are not allowed to modify the properties, however you can change the respective values. Also, when a Data Provider marked as *to be imported* is selected, it's properties are not displayed since its properties are not imported yet.

## Remove a Data Provider Connection

To remove a Data Provider Connection, right click on the DATA PROVIDER which you want to disconnect and choose, REMOVE CONNECTION option. The following screen appears:



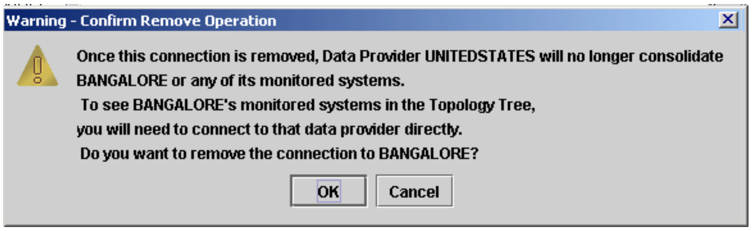
Remove Data Provider Connection

Select Data Providers whose connection will be severed

Connected From: UNITEDSTATES

Connected To: BANGALORE

1. Select the `Connected From` and `Connected To` Data Providers from the lists and click on REMOVE. A pop up window appears with a warning message displayed as follows,

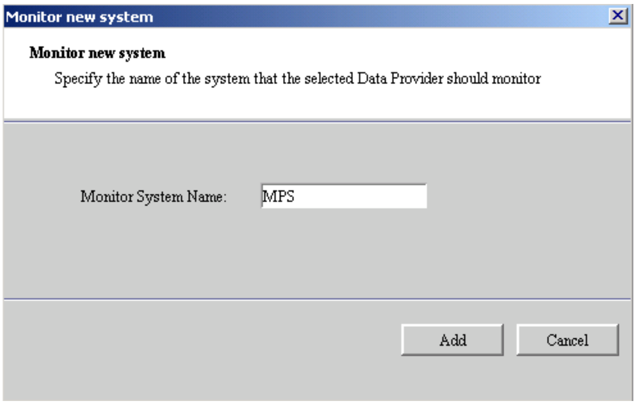


Once this connection is removed, Data Provider UNITEDSTATES will no longer consolidate BANGALORE or any of its monitored systems.
To see BANGALORE's monitored systems in the Topology Tree,
you will need to connect to that data provider directly.
Do you want to remove the connection to BANGALORE?

2. Read the warning message and click on OK to remove the connection.

## Adding Monitored System

To add a monitored system to the monitored systems list, select a Data Provider from the first list on the left hand side and then, click on the ADD button under the second list on the left hand side of the screen. The following screen appears:



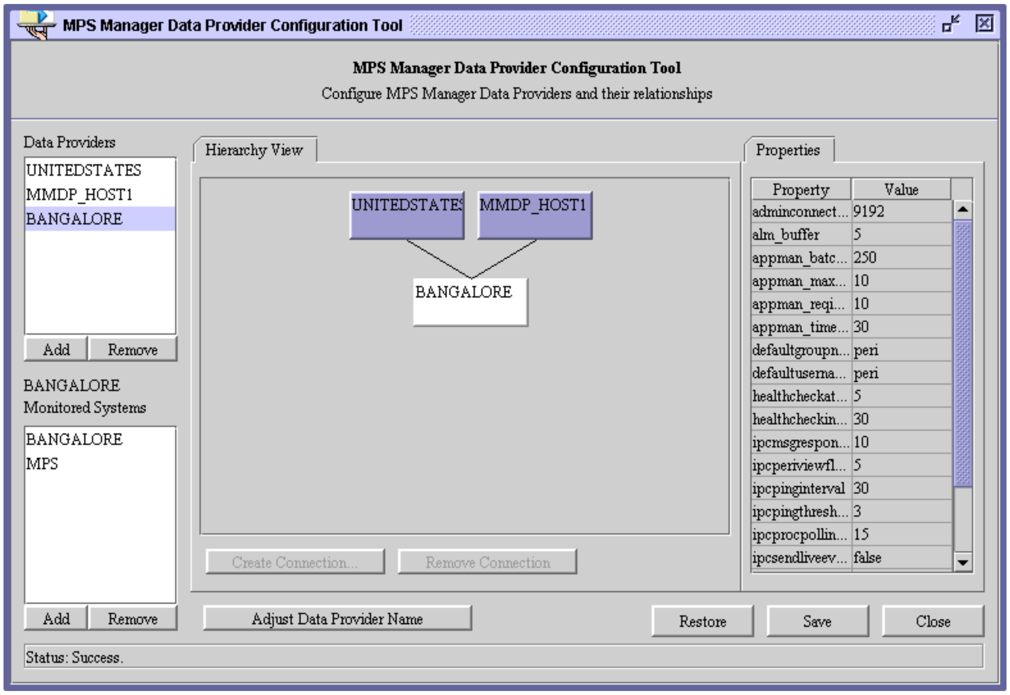
Monitor new system

**Monitor new system**

Specify the name of the system that the selected Data Provider should monitor

Monitor System Name: MPS

1. Specify the name of the system and click on the ADD button. The newly added system appears in the monitored systems list as follows:



MPS Manager Data Provider Configuration Tool

**MPS Manager Data Provider Configuration Tool**

Configure MPS Manager Data Providers and their relationships

Data Providers

UNITEDSTATES
MMDP_HOST1
BANGALORE

BANGALORE
Monitored Systems

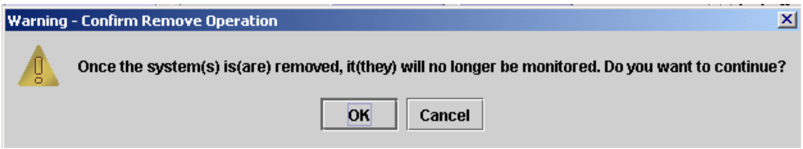
BANGALORE
MPS

| Property | Value |
|---|---|
| adminconnect... | 9192 |
| alm_buffer | 5 |
| appman_batc... | 250 |
| appman_max... | 10 |
| appman_reqi... | 10 |
| appman_time... | 30 |
| defaultgroupn... | peri |
| defaultusema... | peri |
| healthcheckat... | 5 |
| healthcheckin... | 30 |
| ipcmsgrespon... | 10 |
| ipcperiviewfl... | 5 |
| ipcpinginterval | 30 |
| ipcpingthresh... | 3 |
| ipcprocpollin... | 15 |
| ipcsendliveev... | false |

Status: Success.

## Removing Monitored System

To remove the monitored system, click on the REMOVE button under the second list on the left hand side of the screen. The following screen appears:



Once the system(s) is(are) removed, it(they) will no longer be monitored. Do you want to continue?

1. To remove the monitored system, click on OK.

## Supporting Data Replication in MMDP

MMDP has a built-in capability to replicate the configuration of all data providers amongst other PeriView Data Providers, provided that they are not configured as Service MMDPs. Data replication occurs only amongst consolidator MMDPs.

Data Replication occurs in the following scenarios:

- A user changes the MMDP configuration data on one MMDP which is connected to at least one more MMDP, acting as a consolidator.

or,

- A user requests to import a Consolidator MMDP's configuration and the operation completes successfully (the imported MMDP receives the merged configuration which includes not only itself, but also the configuration data of all the other MMDP that the user was connected to).

In order for data replication to occur, the following conditions must be satisfied:

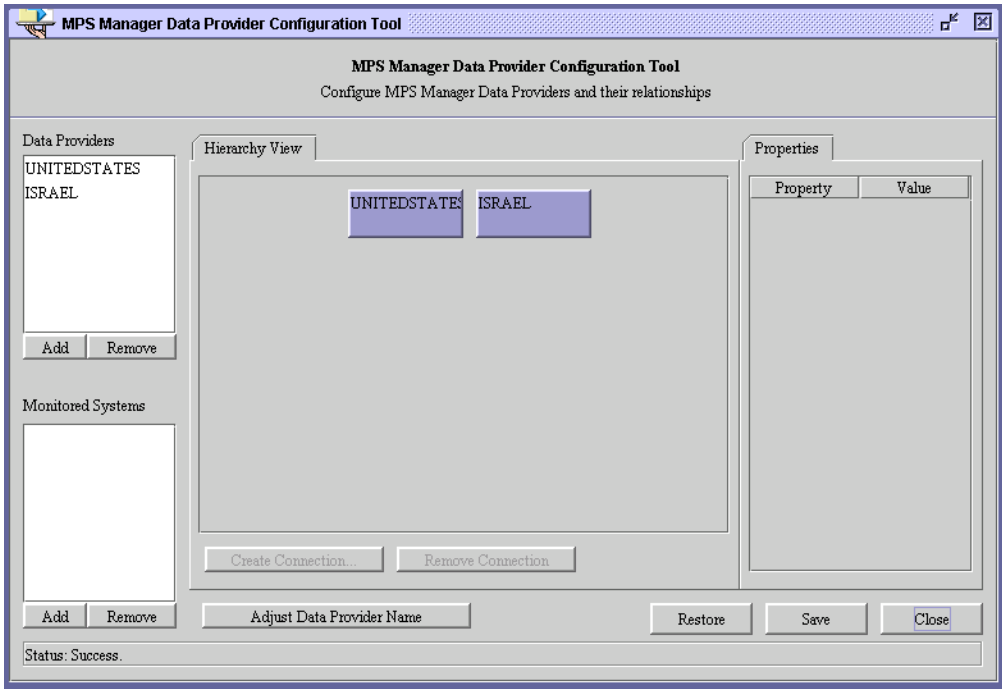
- The MMDPs must be able to establish a network connection between them.
- The MMDP that sends the update (called the replicator) has newer information than the MMDP that receives the update (called the replicant).

If updates are done on a replicator, and it is not connected to a replicant, the updates are cached until such time when the replicator is able to connect. Under most circumstances, both machines will be up and running, and replication will occur within one second.

Data replication in MMDP implies that the data stored and displayed through the clients (PeriView) is consistent and correct at all times. To better understand replication, consider the following scenario:

> The user is using PeriView to connect to the MMDP, UNITEDSTATES.
>
> Additionally, the user has a second instance of the PeriView client connected to the MMDP, ISRAEL.

In order to understand data replication in MMDP, consider a scenario where in, there are two MMDPs (with the same configuration) namely ISRAEL and UNITEDSTATES. These MMDPs are configured through MMDP utility and recognize each other's configurations. Launch the PeriView and connect to ISRAEL and simultaneously launch another session of PeriView and connect to UNITEDSTATES as shown below:

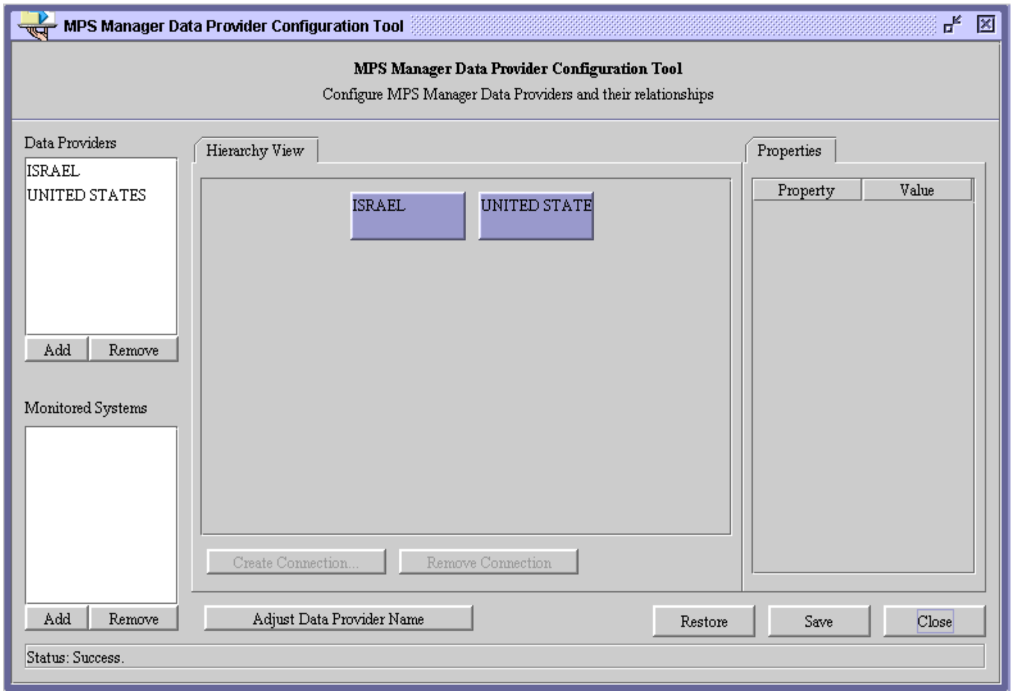


MPS Manager Data Provider Configuration Tool

Configure MPS Manager Data Providers and their relationships

Data Providers: UNITEDSTATES, ISRAEL

Status: Success.



MPS Manager Data Provider Configuration Tool

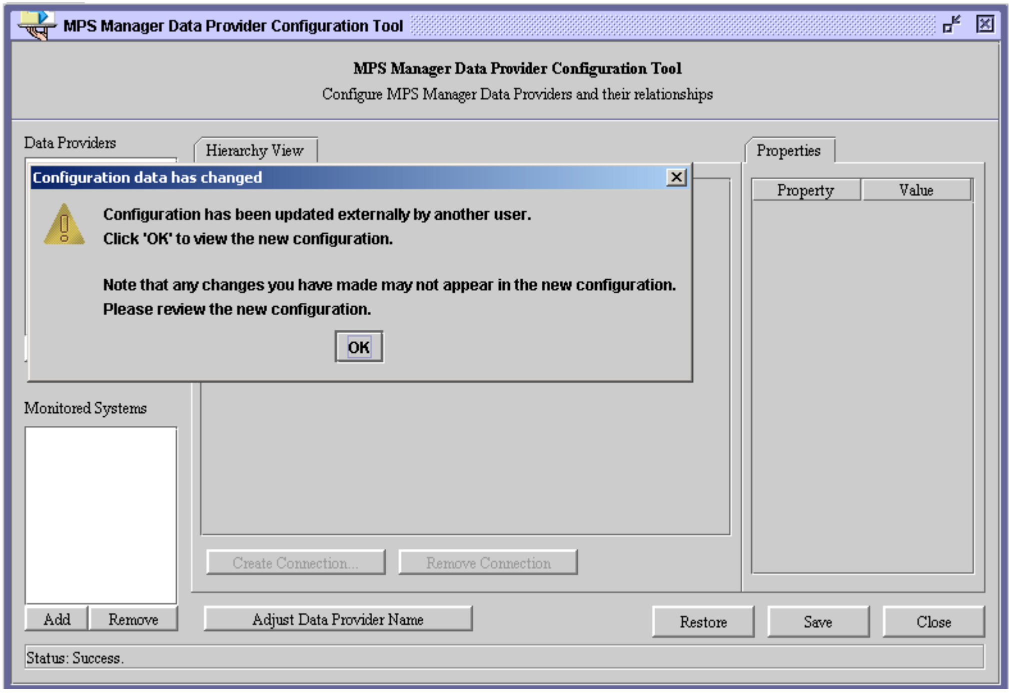
Configure MPS Manager Data Providers and their relationships

Data Providers: ISRAEL, UNITED STATES

Status: Success.

As stated earlier, if the user changes a configuration item on one MMDP, the other MMDP receives an update. The receiving MMDP is responsible for notifying all its PeriView clients that a modification has taken place.

In the same scenario as above (using the PeriView connection to ISRAEL), if you select ISRAEL, change its properties and save these changes, the entire configuration of all MMDPS is redistributed to all replicant MMDPs. That is, information about the changes made in the configuration of ISRAEL gets distributed to all the MMDPs (and open PeriViews) in the system. A message is displayed in the PeriView connected to UNITEDSTATES as follows:


MPS Manager Data Provider Configuration Tool
MPS Manager Data Provider Configuration Tool
Configure MPS Manager Data Providers and their relationships
Data Providers
Hierarchy View
Properties
Property
Value
Monitored Systems
Create Connection...
Remove Connection
Add
Remove
Adjust Data Provider Name
Restore
Save
Close
Status: Success.
Configuration data has changed
OK

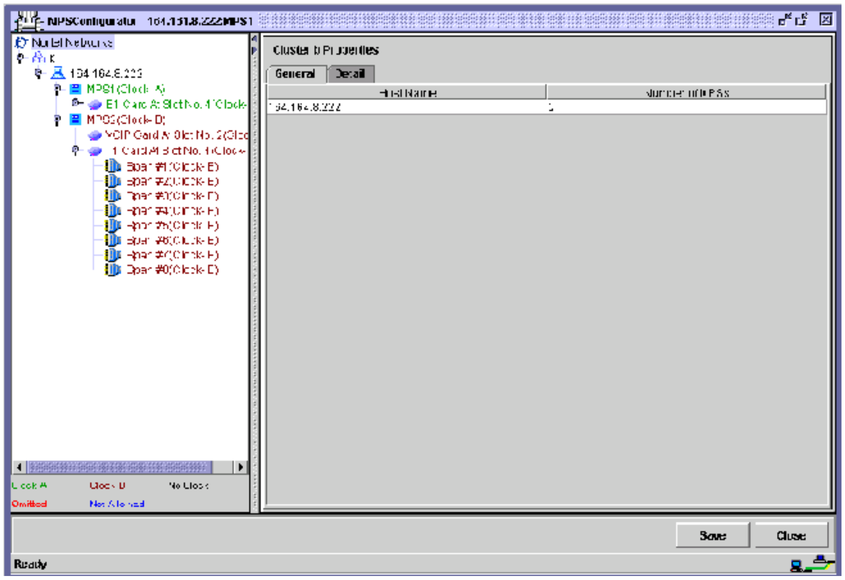
Configuration has been updated externally by another user.
Click 'OK' to view the new configuration.

Note that any changes you have made may not appear in the new configuration.
Please review the new configuration.

To view the updated configuration, click OK in the pop-up window. This will force the data to be applied and the correct information is displayed in the PeriView connected to UNITEDSTATES.

In the event, there were changes being made to the configuration of UNITEDSTATES, which weren't saved, the changes will be lost due to the mandatory update information from ISRAEL. This guarantees that a client cannot selectively deny an update from occurring.

## MPS Configuration



| Host Name | Number of MPSs |
|---|---|
| 164.164.8.222 | 2 |

MPS Configurator distributes the same tms.cfg file to all nodes defined in the cluster that it works on. Therefore, make sure to properly configure a cluster that contains the desired nodes before using the MPS Configurator. Use the Cluster Configurator plugin to configure clusters. For additional information, see ***Cluster Configuration*** on page 208.

The MPS Configurator is the utility to configure the `tms.cfg` file, which is accessed by several MPS processes.

This file is located at

Solaris: `$MPSHOME/common/etc/tms/tms.cfg`.

Windows 2000: `%MPSHOME%\common\etc\tms\tms.cfg`.

For additional information, see ***Cluster Configuration*** on page 208.

The MPS Configurator can:

- Configure System Parameters
- Configure MPS Resource Allocation
- Configure MPS Clock Setting
- Configure MPS Spans
  - Add
  - Remove
  - Resource Setting
  - Protocol Setting
  - Line Mapping
- Manage NIC Cards

### Function

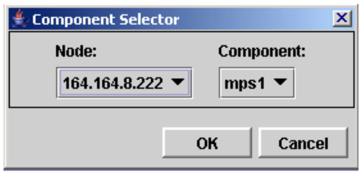
1. Open the MPS Control Center by clicking its icon.
2. Choose MPS Configuration.

   This can be done in one of two ways:

   a. Highlight an MPS component to configure by clicking on it within the tree structure, and then double-click MPS Configuration.

   or

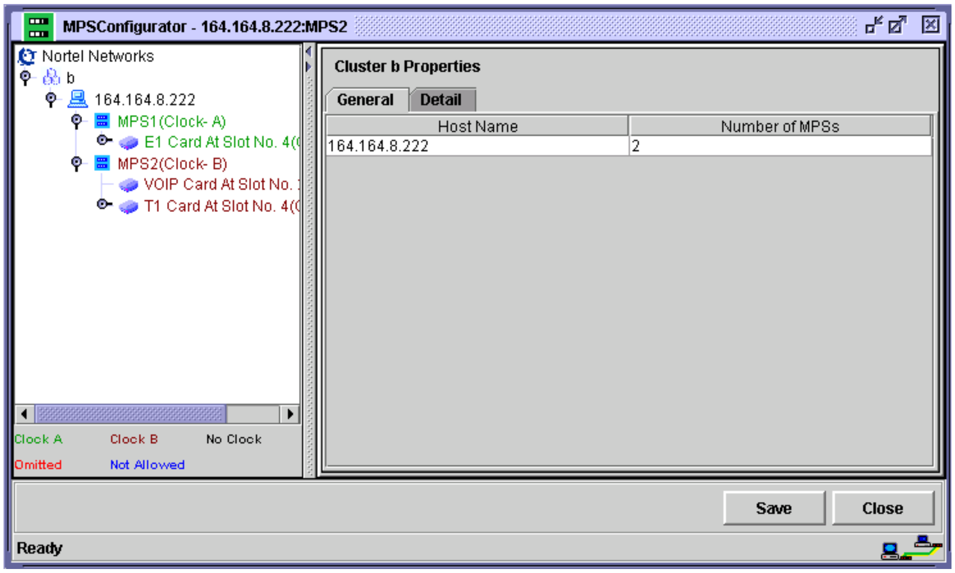
   b. Double-click the MPS Configuration. Then the Component Selector will open.



Node: 164.164.8.222

Component: mps1

Use the pull down menus to choose the node and component to configure and click OK.



Cluster b Properties

| Host Name | Number of MPSs |
|---|---|
| 164.164.8.222 | 2 |

Ready

3. The MPS Configurator will open, showing the selected cluster and the nodes in the cluster in a tree structure on the left-hand side. The right-hand side panel displays different properties according to different selections of the tree levels.

   **(a)** At the Root or Cluster level:

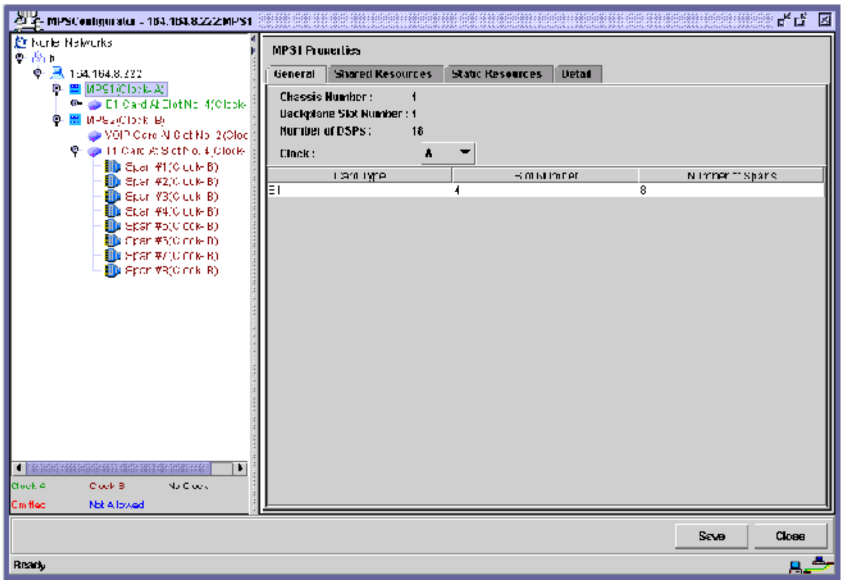
   Click on the “General” tab to display the nodes in the cluster.
   Click on the Details tab to display all configuration information of this cluster.
   No change can be made at this level.

   **(b)** At the Node level:

   Click on the “General” tab to display the MPS components on the node. You can configure the DTCMAP/BIND section in the `tms.cfg` file by clicking ADD or MODIFY buttons.
   Click on the Details tab to display all configuration information of this node.

   **(c)** At the Component level:

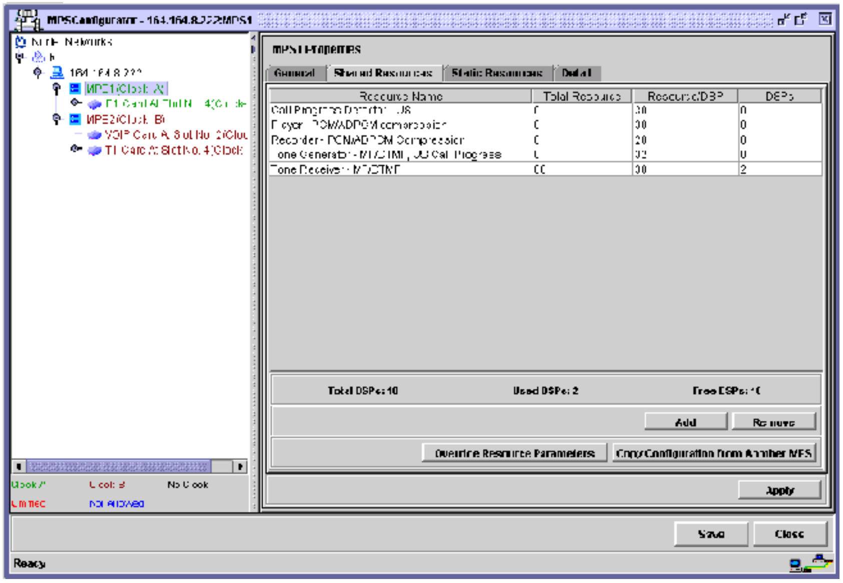
   Click on the “General” tab to display the properties of this MPS component; Clock can be configured here.



Chassis Number : 1
Backplane Slot Number : 1
Number of DSPs : 18
Clock : A

| Card Type | Slot Number | Number of Spans |
|---|---|---|
| E1 | 1 | 8 |

Click on the “Shared Resources” tab to display the shared resources configured on this MPS. You can add or remove resources, override resources parameters, or copy the resources configuration from another MPS component.


MPSConfigurator - 164.164.8.222:MPS1

- Nortel Networks
  - k
    - 164.164.8.222
      - MPS1(Clock A)
        - E1 Card A Slot No. 4(Clock
      - MPS2(Clock B)
        - VOIP Card A Slot No. 2(Cloc
        - T1 Card A Slot No. 4(Clock

Clock A   Clock B   No Clock
Omitted   Not Allowed

MPS1 Properties

General | Shared Resources | Static Resources | Detail

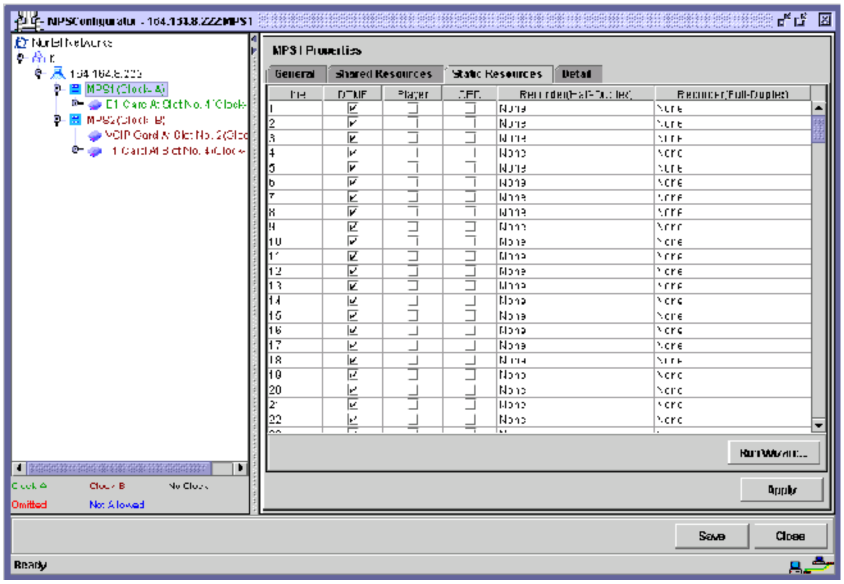
| Resource Name | Total Resources | Resources/DSP | DSPs |
|---|---|---|---|
| Call Progress Detection - US | 0 | 30 | 0 |
| Player - PCM/ADPCM compression | 0 | 30 | 0 |
| Recorder - PCM/ADPCM Compression | 0 | 20 | 0 |
| Tone Generator - MF/DTMF, US Call Progress | 0 | 32 | 0 |
| Tone Receiver - MF/DTMF | 60 | 30 | 2 |

Total DSPs: 10   Used DSPs: 2   Free DSPs: [illegible]

Add
Remove
Override Resource Parameters
Copy Configuration from Another MPS
Apply
Save
Close

Ready

Click on the “Static Resources” tab to display the static resources configured on this MPS component. The static resources can be configured on the lines of the MPS component.


MPSConfigurator - 164.164.8.222:MPS1

- Nortel Networks
  - k
    - 164.164.8.222
      - MPS1(Clock A)
        - E1 Card A Slot No. 4(Clock
      - MPS2(Clock B)
        - VOIP Card A Slot No. 2(Cloc
        - T1 Card A Slot No. 4(Clock

Clock A   Clock B   No Clock
Omitted   Not Allowed

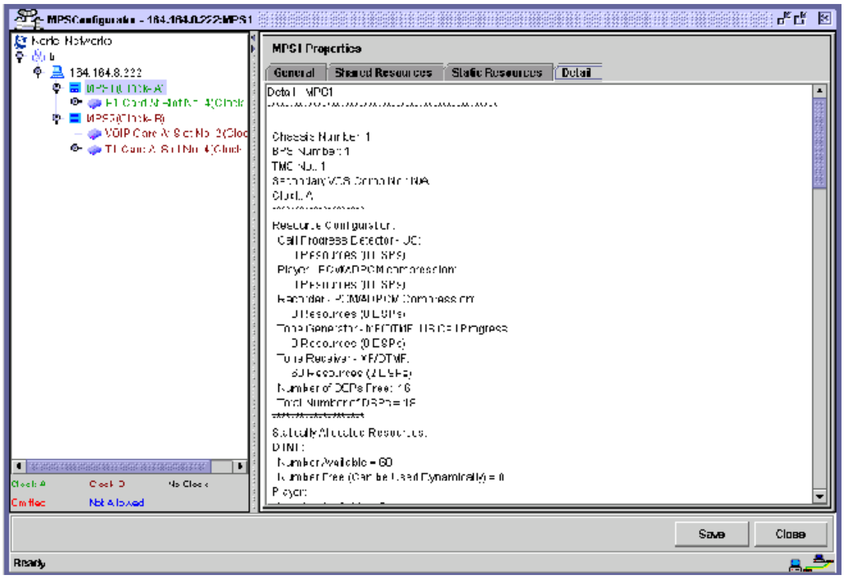
MPS1 Properties

General | Shared Resources | Static Resources | Detail

| Line | DTMF | Player | CPD | Recorder(Half-Duplex) | Recorder(Full-Duplex) |
|---|---|---|---|---|---|
| 1 | ☑ | ☐ | ☐ | None | None |
| 2 | ☑ | ☐ | ☐ | None | None |
| 3 | ☑ | ☐ | ☐ | None | None |
| 4 | ☑ | ☐ | ☐ | None | None |
| 5 | ☑ | ☐ | ☐ | None | None |
| 6 | ☑ | ☐ | ☐ | None | None |
| 7 | ☑ | ☐ | ☐ | None | None |
| 8 | ☑ | ☐ | ☐ | None | None |
| 9 | ☑ | ☐ | ☐ | None | None |
| 10 | ☑ | ☐ | ☐ | None | None |
| 11 | ☑ | ☐ | ☐ | None | None |
| 12 | ☑ | ☐ | ☐ | None | None |
| 13 | ☑ | ☐ | ☐ | None | None |
| 14 | ☑ | ☐ | ☐ | None | None |
| 15 | ☑ | ☐ | ☐ | None | None |
| 16 | ☑ | ☐ | ☐ | None | None |
| 17 | ☑ | ☐ | ☐ | None | None |
| 18 | ☑ | ☐ | ☐ | None | None |
| 19 | ☑ | ☐ | ☐ | None | None |
| 20 | ☑ | ☐ | ☐ | None | None |
| 21 | ☑ | ☐ | ☐ | None | None |
| 22 | ☑ | ☐ | ☐ | None | None |

Ready

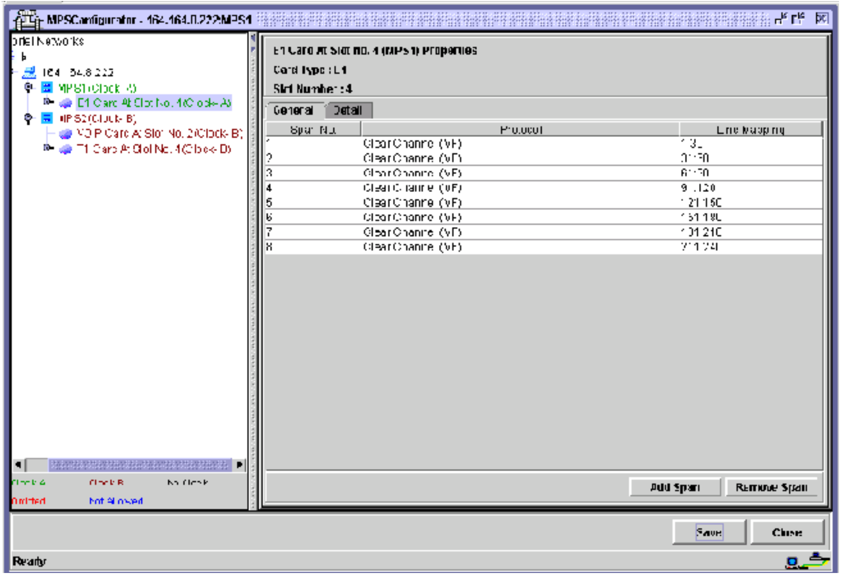
Click on the “Details” tab to display all configuration of this MPS component.



```
Detail - MPS1
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~


 Chassis Number: 1
 BPS Number: 1
 TMC No.: 1
 Secondary VOS Comp No : NA
 Clock: A
 ~~~~~~~~~~~~~~~~~~~~
 Resource Configuration:
  Call Progress Detector - JC:
      0 Resources (0 DSPs)
  Player - PCM/ADPCM compression
      0 Resources (0 DSPs)
  Recorder - PCM/ADPCM Compression
     0 Resources (0 DSPs)
  Tone Generator - MF/DTMF, US Call Progress
     0 Resources (0 DSPs)
  Tone Receiver - MF/DTMF,
     60 Resources (2 DSPs)
  Number of DSPs Free: 16
  Total Number of DSPs = 18
 ~~~~~~~~~~~~~~~~~~~~
 Statically Allocated Resources:
 DTMF:
  Number Available = 60
  Number Free (Can be Used Dynamically) = 0
 Player:
```

**(d)** At the TMS card level:



E1 Card At Slot no. 4 (MPS1) Properties

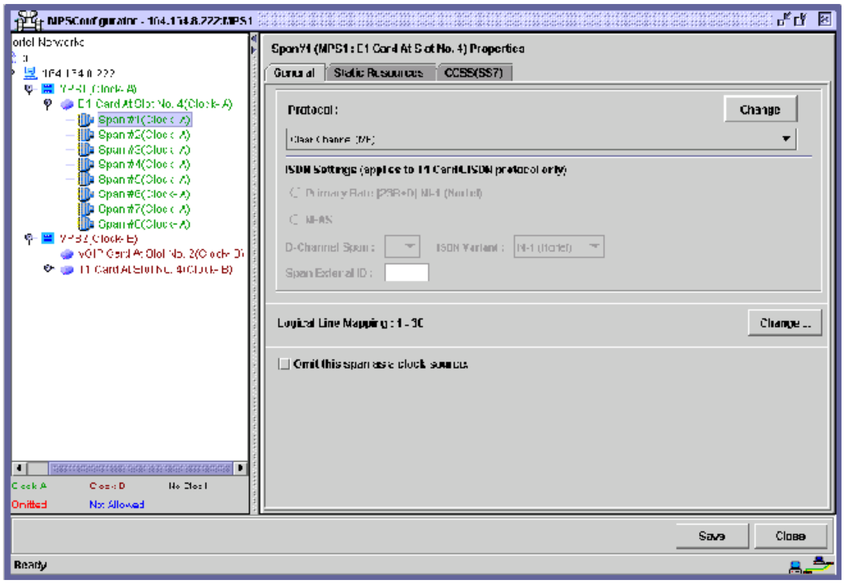
Card Type : E1

Slot Number : 4

| Span No. | Protocol | Line Mapping |
|---|---|---|
| 1 | ClearChanne (VF) | 1-30 |
| 2 | ClearChanne (VF) | 31-60 |
| 3 | ClearChanne (VF) | 61-90 |
| 4 | ClearChanne (VF) | 91-120 |
| 5 | ClearChanne (VF) | 121-150 |
| 6 | ClearChanne (VF) | 151-180 |
| 7 | ClearChanne (VF) | 181-210 |
| 8 | ClearChanne (VF) | 211-240 |

Click on the “General” tab to display the spans configured on this card. You can add or remove span here.
Click on the “Details” tab to display all configuration of this TMS card.

**(e)** At the span level:



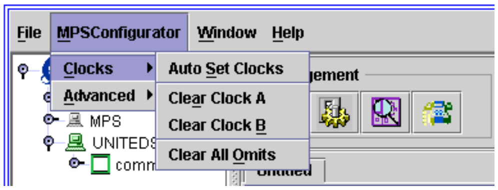
Click on the “General” tab to set the span’s configuration, including protocol, line mapping, and ISDN associated configuration (when applicable).

Click on the “Static Resources” tab to display the static resources configured on this span. Static Resources can be configured on the lines of this span.

Click on the “CCSS(SS7)” tab to configure the CCSS (SS7) settings. This tab will be enabled only when an appropriate protocol is applied to this span and a DCC3000 card is installed.

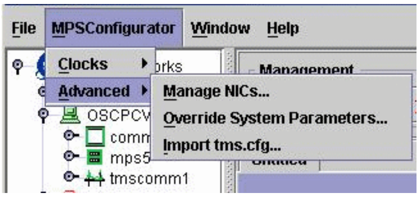
4. Using the MPS Configurator menu selection, the configuration can be performed as follows:

**(f)** Clocks:



Click on the menu “MPSConfigurator” on PeriView menu bar and select “Clocks”. The clocks of MPS components can be configured by choosing the appropriate menu item.

**(g)** Manage Network Interface Cards (NICs):



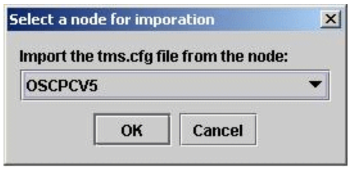
**(h)** Click on the menu “MPSConfigurator” on PeriView menu bar and select “Advanced”, then “Manage NICs”. Network Interface Cards can be configured in the `tms.cfg` file.

**(i)** Override System Parameters:

Click on the menu “MPSConfigurator” on PeriView menu bar and select “Advanced”, then “Override System Parameters”. You can override the specific system parameters in the `tms.cfg` file.

⚠ **MPS Configurator cannot validate the overridden system parameters. Therefore, make sure that the overridden data is valid to avoid any undesired result.**

**(j)** Import a `tms.cfg` from another node in the cluster:

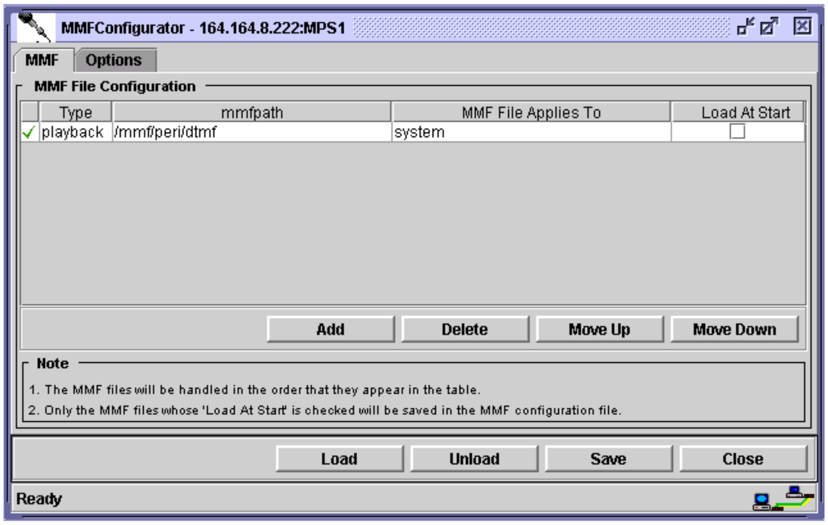


Import the tms.cfg file from the node: OSCPCV5

Click on the menu “MPSConfigurator” on PeriView menu bar and select “Advanced”, then Import `tms.cfg`. When user has a cluster containing multiple nodes, the user can import the `tms.cfg` file from another node other than MPS Configurator starts with as needed.

☞ Only the data associated with the MPS components of the node will be imported. Any other data in the imported `tms.cfg` file will be ignored.

## MMF Configuration



MMFConfigurator - 164.164.8.222:MPS1

MMF File Configuration

|  | Type | mmfpath | MMF File Applies To | Load At Start |
|---|---|---|---|---|
| ✓ | playback | /mmf/peri/dtmf | system | □ |

Note

1. The MMF files will be handled in the order that they appear in the table.
2. Only the MMF files whose 'Load At Start' is checked will be saved in the MMF configuration file.

Ready

The Multi-Media File (MMF) Configurator provides a Graphical User Interface (GUI) to configure the `vmm-mmf.cfg` file.

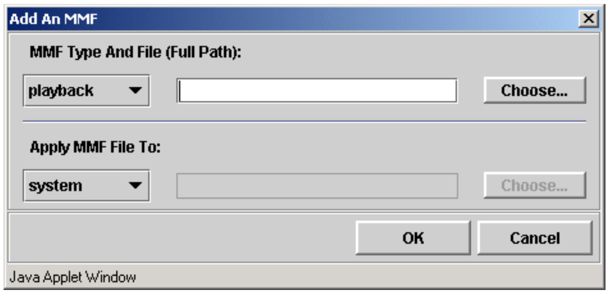
This file is located in `$MPSHOME/mpsN/etc/vmm-mmf.cfg`.

The MMF Configurator can:

- Configure the `vmm-mmf.cfg` file of a selected component
- Load/Unload MMF files dynamically.

### Function

5. Click the ADD button to add a new MMF file.



Add An MMF

MMF Type And File (Full Path): playback

Apply MMF File To: system

Java Applet Window

- Type in the path or click CHOOSE to locate the desired MMF file.
- Using the pull-down menu choose whether the file will Record or Playback.
- Using the pull-down menu choose whether the file should be applied to the System or the Application.

6. Click the DELETE button to remove an MMF file.

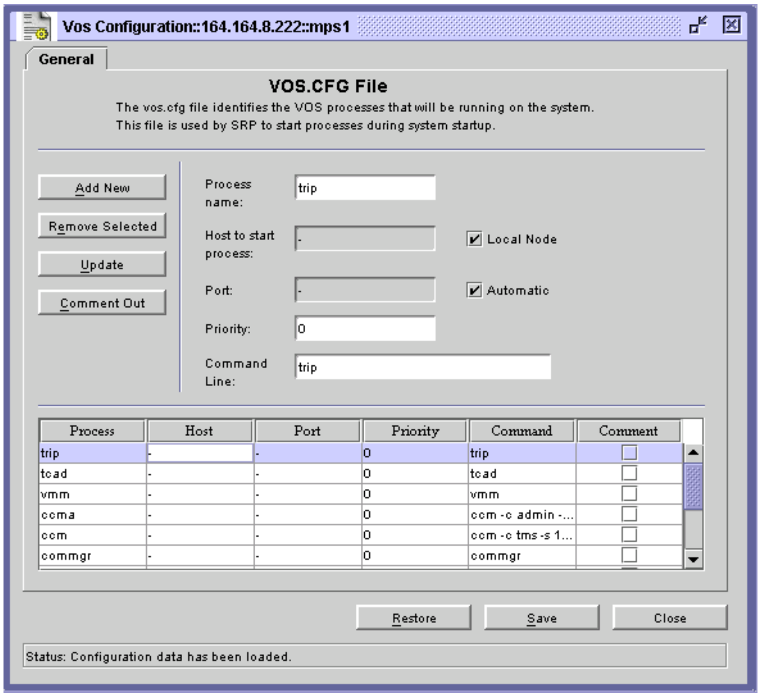
7. Click the MOVE UP or MOVE DOWN buttons to change the order of the MMF files.

**8.** Click the checkbox under Load At Start to choose whether a specific file should be loaded at startup.

**9.** Choose MMF File Options

- Turn Load all Elements Into VDM on or off.
- Set the PreLoad Time of Each Element (in seconds)

## VOS Configuration



**VOS.CFG File**

The vos.cfg file identifies the VOS processes that will be running on the system.
This file is used by SRP to start processes during system startup.

Process name: trip

Host to start process: -  ☑ Local Node

Port: -  ☑ Automatic

Priority: 0

Command Line: trip

| Process | Host | Port | Priority | Command | Comment |
|---|---|---|---|---|---|
| trip | - | - | 0 | trip | □ |
| tcad | - | - | 0 | tcad | □ |
| vmm | - | - | 0 | vmm | □ |
| ccma | - | - | 0 | ccm -c admin -... | □ |
| ccm | - | - | 0 | ccm -c tms -s 1... | □ |
| commgr | - | - | 0 | commgr | □ |

Status: Configuration data has been loaded.

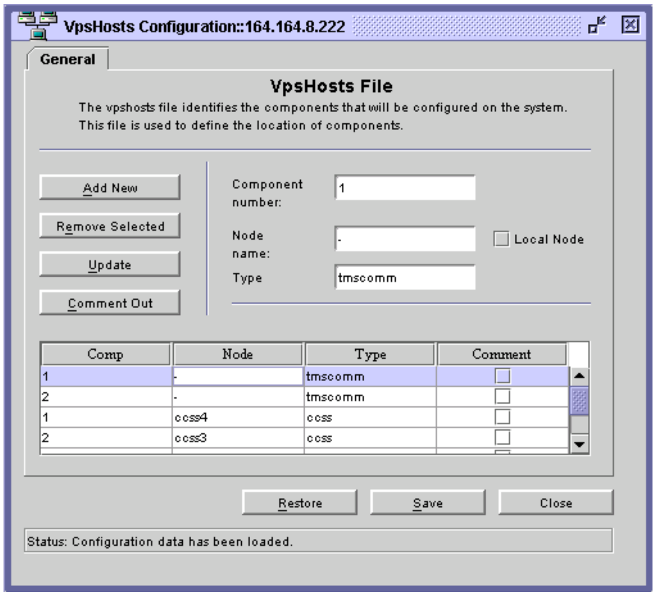
The VOS Configurator provides a Graphical User Interface (GUI) to configure the `vos.cfg` file.

This file is located in `$MPSHOME/mpsN/etc/vos.cfg`.

The VOS Configurator can:

- Add new processes
- Remove existing processes
- Update existing processes
- Comment Out existing processes

## VpsHosts Configuration



VpsHosts File

The vpshosts file identifies the components that will be configured on the system. This file is used to define the location of components.

Component number: 1

Node name: -

□ Local Node

Type: tmscomm

| Comp | Node | Type | Comment |
|---|---|---|---|
| 1 | - | tmscomm | □ |
| 2 | - | tmscomm | □ |
| 1 | ccss4 | ccss | □ |
| 2 | ccss3 | ccss | □ |

Status: Configuration data has been loaded.

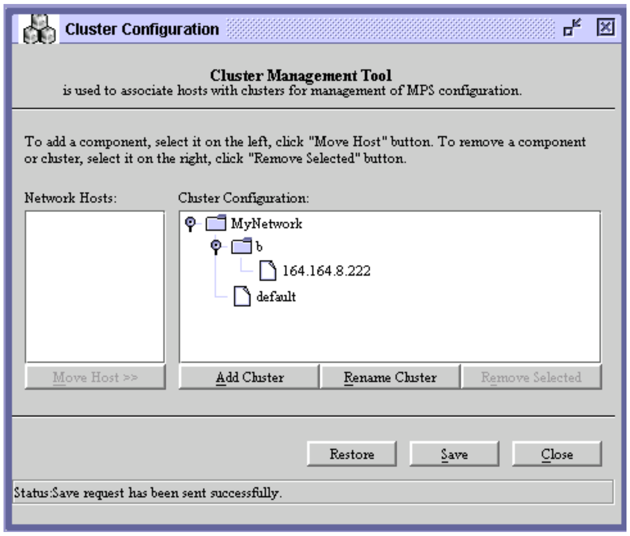
The VpsHosts Configurator provides a Graphical User Interface (GUI) to configure the `vpshosts` file.

This file is located in `$MPSHOME/mpsN/etc/vpshosts`

The VpsHosts Configurator can:

- Add new components
- Remove existing components
- Update existing components
- Comment Out existing components

## Cluster Configuration



Cluster Management Tool
is used to associate hosts with clusters for management of MPS configuration.

To add a component, select it on the left, click "Move Host" button. To remove a component or cluster, select it on the right, click "Remove Selected" button.

Status:Save request has been sent successfully.

The Cluster Configurator provides a Graphical User Interface (GUI) to configure the `clusters.xml` file which resides at the same host where the MPS Manager Data Provider (MMDP) runs.

The cluster information will affect the MPS Configurator.

For additional information, see ***MPS Configuration*** on page 197.

## IPML Configuration

The IPML Configurator allows you to graphically change configuration files.

This section guides you through the IPML Configurator.

Before clicking on the icon for the IPML Configurator within the MPS Control Center you must navigate through the directory structure to locate the node to configure. After doing this, click on the IPML Configurator icon.

Only the node containing the IPML configuration activates the IPML utility. If not the case, the footnote displays “Invalid selection in the Topology tree” message.

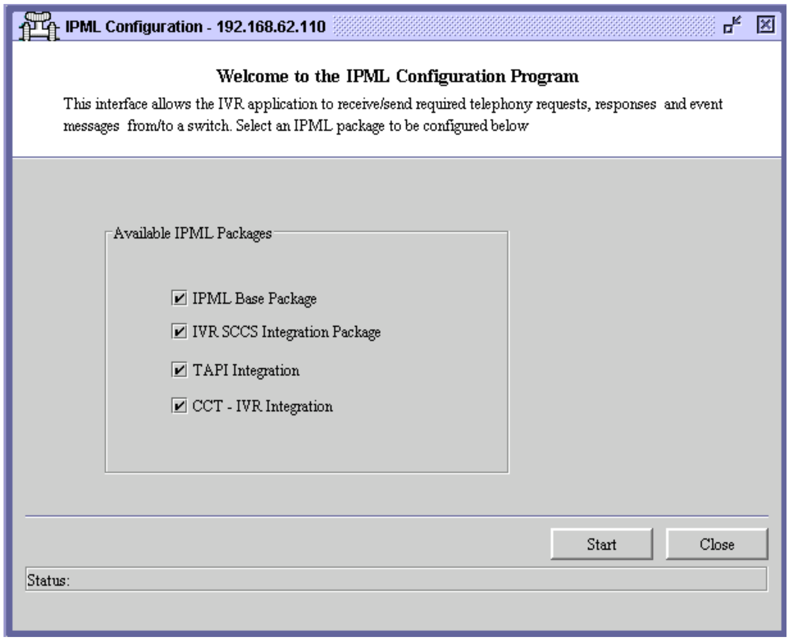
Only one instance of the IPML utility for the node can be active at any given time.

## Choose the Packages to Configure

The first window of the IPML Configurator, Welcome to the IPML Configuration Program, lets you choose the packages you will configure. Depending on the choices you make here, certain windows may or may not appear throughout the rest of the wizard.

To choose the packages to configure:

1. Put a checkmark next to each package to configure. Since the base package is required, there is always a checkmark next to the IPML Base Package.



IPML Configuration - 192.168.62.110

**Welcome to the IPML Configuration Program**

This interface allows the IVR application to receive/send required telephony requests, responses and event messages from/to a switch. Select an IPML package to be configured below

Available IPML Packages

☑ IPML Base Package

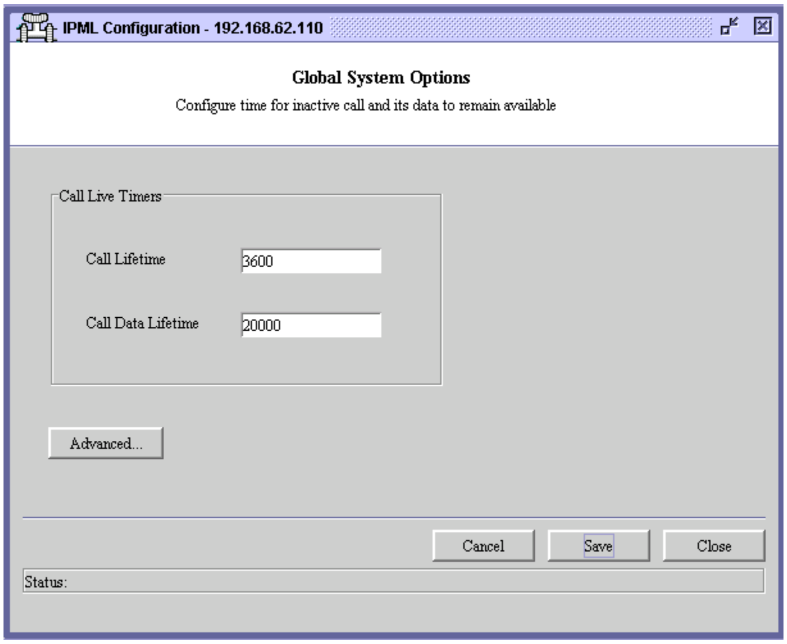
☑ IVR SCCS Integration Package

☑ TAPI Integration

☑ CCT - IVR Integration

Status:

2. Click the Start button. The Global System Options panel appears. It provides options that `csad` uses for the call data.



IPML Configuration - 192.168.62.110

**Global System Options**

Configure time for inactive call and its data to remain available

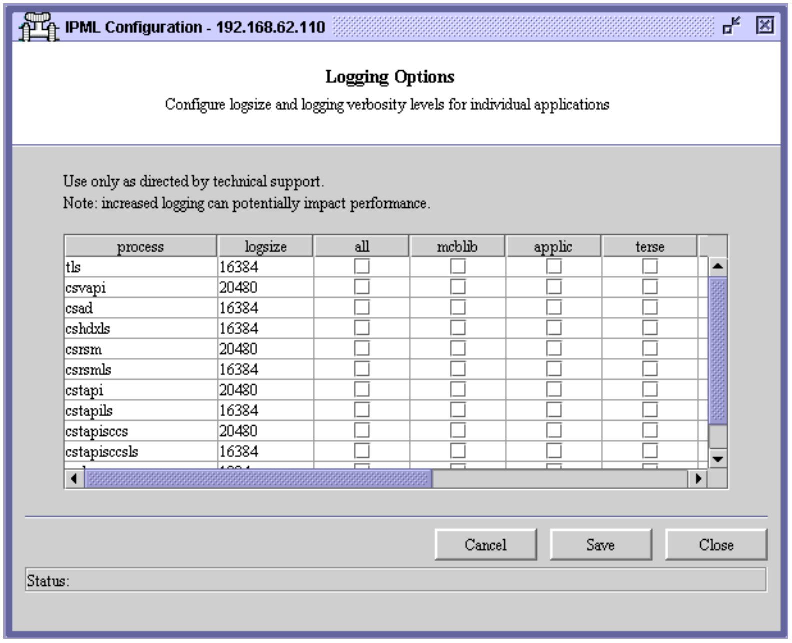
Call Live Timers

Call Lifetime: 3600

Call Data Lifetime: 20000

Status:

3. Click Advanced to view the next panel Logging Options. This panel lists IPML specific processes and configures the way logging is performed on each process.



**Logging Options**

Configure logsize and logging verbosity levels for individual applications

Use only as directed by technical support.
Note: increased logging can potentially impact performance.

| process | logsize | all | mcblib | applic | terse |
|---|---|---|---|---|---|
| tls | 16384 | □ | □ | □ | □ |
| csvapi | 20480 | □ | □ | □ | □ |
| csad | 16384 | □ | □ | □ | □ |
| cshdxls | 16384 | □ | □ | □ | □ |
| csrsm | 20480 | □ | □ | □ | □ |
| csrsmls | 16384 | □ | □ | □ | □ |
| cstapi | 20480 | □ | □ | □ | □ |
| cstapils | 16384 | □ | □ | □ | □ |
| cstapisccs | 20480 | □ | □ | □ | □ |
| cstapisccsls | 16384 | □ | □ | □ | □ |

Status:

4. The following table shows which windows appear based on the packages you choose. The rest of this chapter describes each of the windows in order.

| **Window in IPML Configurator** | **IPML Base Package only** | **Base Package plus IVR SCCS Integration Package** | **Base Package plus TAPI Integration** | **Base Package plus CCT-IVR Integration** |
|---|---|---|---|---|
| Configure External Host Interface | ✓ | ✓ | ✓ | ✓ |
| Telephony Link Server Identifier | ✓ | ✓ | ✓ | ✓ |
| Telephony Link Server Interface | ✓ | ✓ | ✓ | ✓ |
| Telephony Link Interface | ✓ | ✓ | ✓ | ✓ |
| IPML SP Identifier | | | | ✓ |
| IPML SP Interface | | | | ✓ |
| SCCS Host Data Exchange (Bi-Directional) Interface (3 windows) | | ✓ | | |
| Server Side Connection for SCCS Server for Real-Time Stats (2 windows) | | ✓ | | |
| SCCS Server Connection to Send Data Only (3 windows) | | ✓ | | |
| TAPI Server connection to Symposium Microsoft TAPI Server (3 windows) | | | ✓ | |

| | | | | |
|---|---|---|---|---|
| Configure Internal Host Interface | ✓ | ✓ | ✓ | ✓ |
| CTI Connection to the IVR (2 windows) | ✓ | ✓ | ✓ | ✓ |
| Advanced Options::CSVAPI | ✓ | ✓ | ✓ | ✓ |
| Real-Time Agent Stats Connection to the IVR (2 windows) | | ✓ | | |
| Advanced Options::CSRSM | | ✓ | | |
| TAPI SCCS Connection to the IVR (2 windows) | | ✓ | | |
| TAPI Connection to the IVR (2 windows) | | | ✓ | |

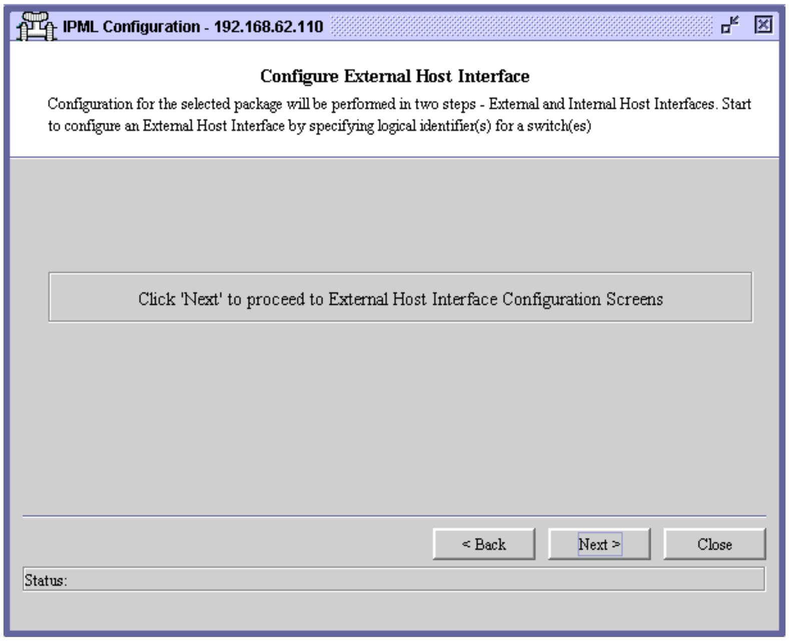
| **Window in IPML Configurator** | **IPML Base Package plus IVR SCCS Integration Package and TAPI Integration** | **Base Package plus IVR SCCS Integration Package and CCT-IVR Integration** | **Base Package plus TAPI Integration and CCT-IVR** | **Base Package plus IVR SCCS Integration Package, TAPI Integration and CCT-IVR Integration** |
|---|---|---|---|---|
| Configure External Host Interface | ✓ | ✓ | ✓ | ✓ |
| Telephony Link Server Identifier | ✓ | ✓ | ✓ | ✓ |
| Telephony Link Server Interface | ✓ | ✓ | ✓ | ✓ |
| Telephony Link Interface | ✓ | ✓ | ✓ | ✓ |
| IPML SP Identifier |  | ✓ | ✓ | ✓ |
| IPML SP Interface |  | ✓ | ✓ | ✓ |
| SCCS Host Data Exchange (Bi-Directional) Interface (3 windows) | ✓ | ✓ |  | ✓ |
| Server Side Connection for SCCS Server for Real-Time Stats (2 windows) | ✓ | ✓ |  | ✓ |
| SCCS Server Connection to Send Data Only (3 windows) | ✓ | ✓ |  | ✓ |

| | | | | |
|---|---|---|---|---|
| TAPI Server connection to Symposium Microsoft TAPI Server (3 windows) | ✓ | | ✓ | ✓ |
| Configure Internal Host Interface | ✓ | ✓ | ✓ | ✓ |
| CTI Connection to the IVR (2 windows) | ✓ | ✓ | ✓ | ✓ |
| Advanced Options::CSVAPI | ✓ | ✓ | ✓ | ✓ |
| Real-Time Agent Stats Connection to the IVR (2 windows) | ✓ | ✓ | | ✓ |
| Advanced Options::CSRSM | ✓ | ✓ | | ✓ |
| TAPI SCCS Connection to the IVR (2 windows) | ✓ | ✓ | | ✓ |
| TAPI Connection to the IVR (2 windows) | ✓ | | ✓ | ✓ |

## Telephony Link Server

Use these windows to specify the new or existing telephony link server to associate with a switch.

These windows always appear, since they are used to configure the required base package.



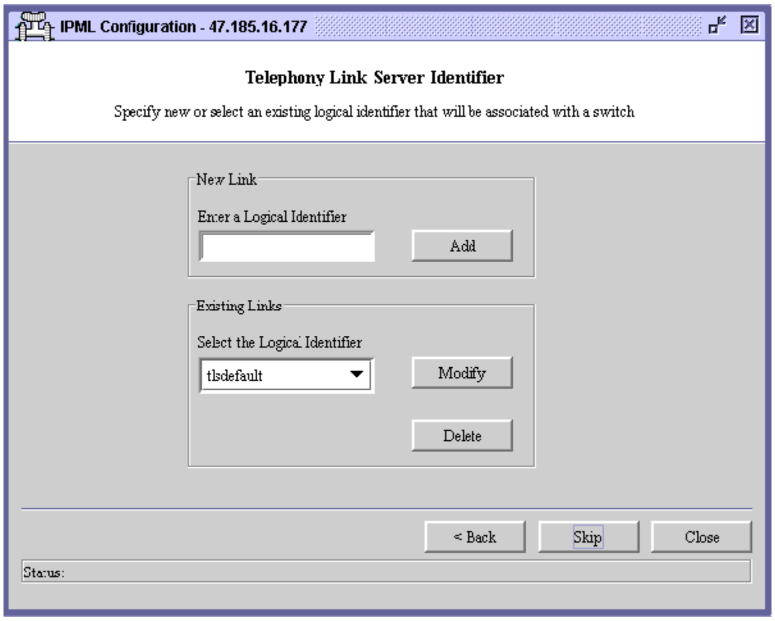
IPML Configuration - 192.168.62.110

**Configure External Host Interface**

Configuration for the selected package will be performed in two steps - External and Internal Host Interfaces. Start to configure an External Host Interface by specifying logical identifier(s) for a switch(es)

Click 'Next' to proceed to External Host Interface Configuration Screens

1. In the Configure External Host Interface window, click the Next button. The Telephony Link Server Identifier screen appears.



IPML Configuration - 47.185.16.177

**Telephony Link Server Identifier**

Specify new or select an existing logical identifier that will be associated with a switch

New Link

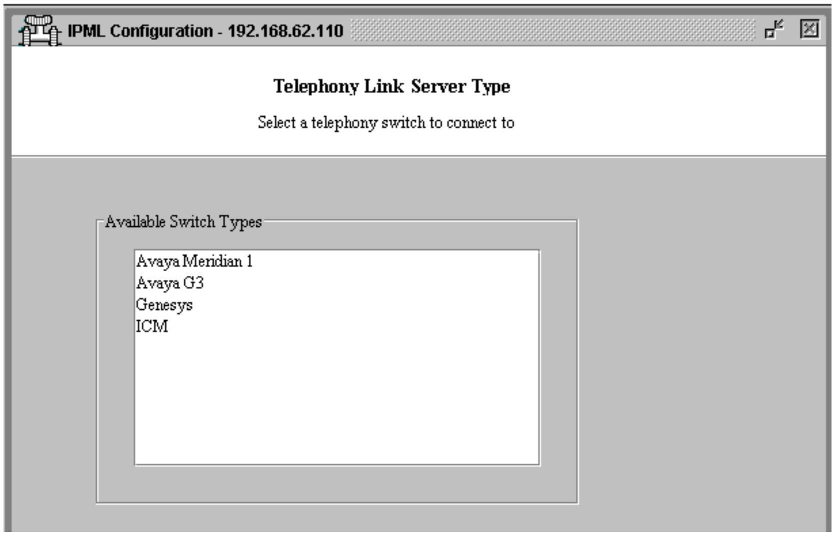
Enter a Logical Identifier

Existing Links

Select the Logical Identifier: tlsdefault

**2.** To add a new link:

**a.** Type a name in the Enter a Logical Identifier box and click Add. The Telephony Link Server Type window appears.



**Telephony Link Server Type**

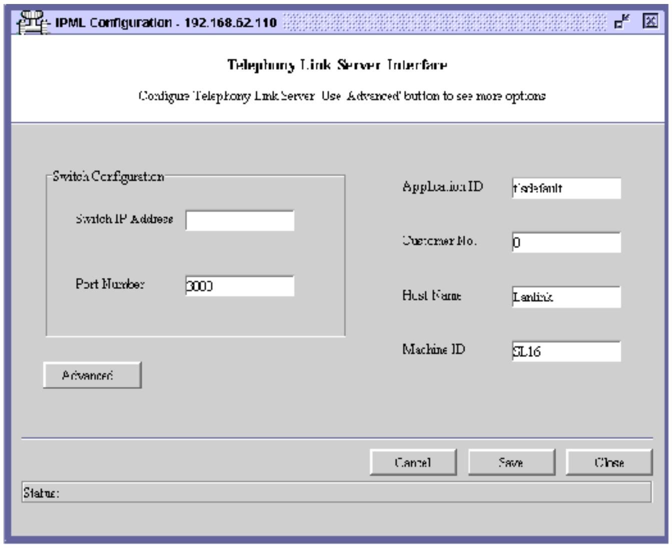
Select a telephony switch to connect to

Available Switch Types

- Avaya Meridian 1
- Avaya G3
- Genesys
- ICM

3. To use an existing link:

   a. Choose the link in the Select the Logical Identifier box and click Modify. The Telephony Link Server Interface window appears.



IPML Configuration - 192.168.62.110

Telephony Link Server Interface

Configure Telephony Link Server. Use 'Advanced' button to see more options

Switch Configuration

Switch IP Address:

Port Number: 3000

Application ID: tsldefault

Customer No.: 0

Host Name: Lanlink

Machine ID: SL16

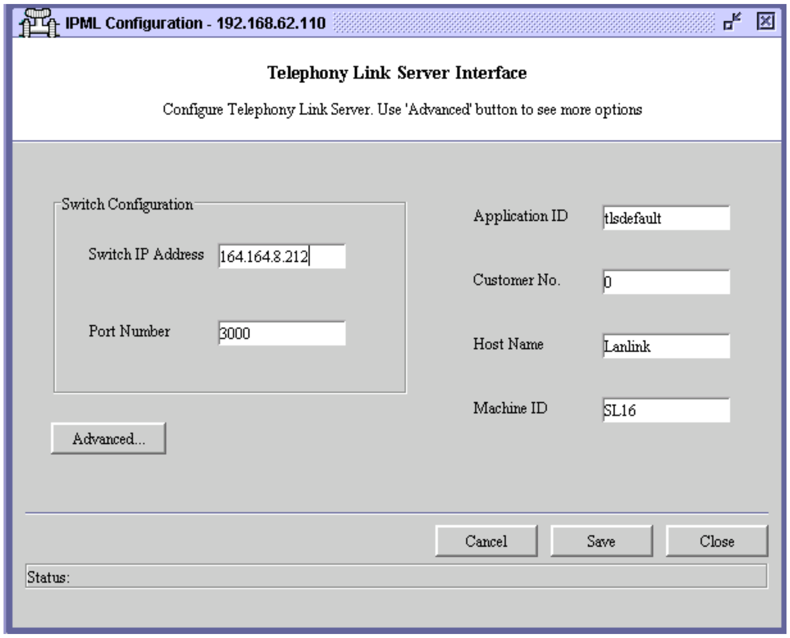
Status:

The attributes displayed in the Telephony Link Server Interface window change depending upon the switch type selected by the user.

Or if you do not need to make changes to a link or add a new one, click the Skip button and go to the next task.

**4.** To delete a link:

**a.** Choose the link in the Select the Logical Identifier box and click Delete.



Telephony Link Server Interface

Configure Telephony Link Server. Use 'Advanced' button to see more options

Switch Configuration

Switch IP Address: 164.164.8.212

Port Number: 3000

Application ID: tlsdefault

Customer No.: 0

Host Name: Lanlink

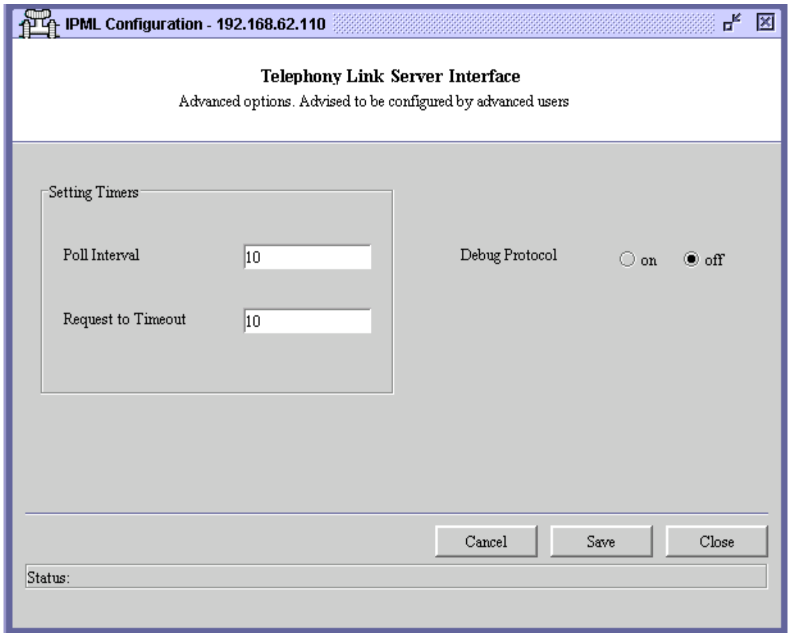
Machine ID: SL16

Status:

**5.** Enter information in the window using the following table.

| Field | Explanation |
|---|---|
| Switch IP Address | Defines the hostname of the machine where the Telephony Link Server is installed. |
| Port Number | The Telephony Link Server connection port. |
| Application ID | Usually the host name of the machine running the Telephony Link Server. |
| Customer No | The PBX customer number defined in the Customer Data block. Allows numbers 0 through 15. |
| Host Name | The host name for the Meridian Link/MLSM. |
| Machine ID | The PBX M1 machine name. Default is SL16. |

**6.** Click the Advanced... button.



IPML Configuration - 192.168.62.110

Telephony Link Server Interface

Advanced options. Advised to be configured by advanced users

Setting Timers

Poll Interval: 10

Request to Timeout: 10

Debug Protocol ○ on ● off

Status:

**7.** Enter information in the window using the following table, then click the Save button.

| Field | Explanation |
|---|---|
| Poll Interval | Number of seconds to wait between polls. Allows values 10 through 120. |
| Request to Timeout | Number of seconds before a request times out. Allows values 10 through 300. |

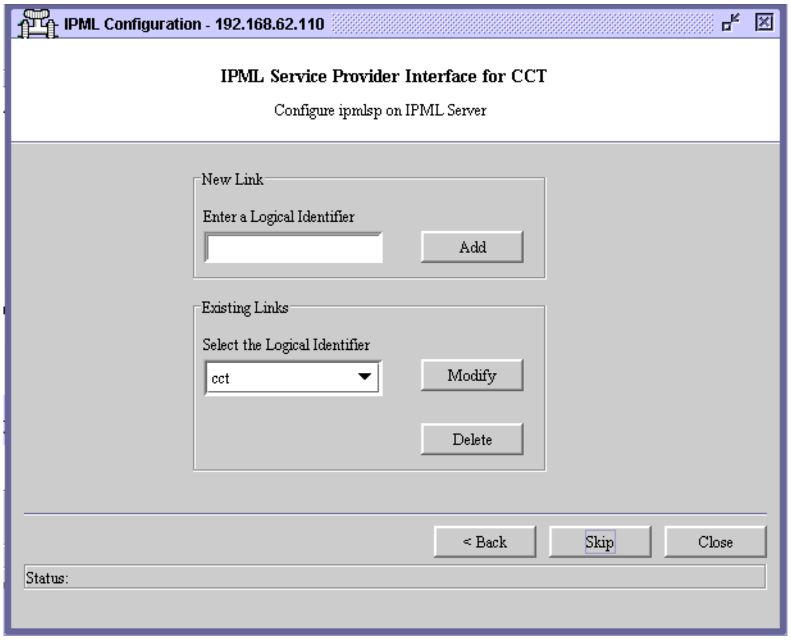
**8.** Click the Save button again.

Currently, IPML supports multiple link servers configuration, which means that the user can configure multiple tls, hdxls, rsmls, tapils (ls means 'link server').

## CCT-IVR Integration

Use these windows to configure the IPML Service Provider package.

These windows appear only if you are configuring the IPML Service Provider Integration package.



IPML Configuration - 192.168.62.110

IPML Service Provider Interface for CCT

Configure ipmlsp on IPML Server

New Link

Enter a Logical Identifier

Existing Links

Select the Logical Identifier: cct

Status:

1. To use an existing link:

   a. Choose the link in the Select the Logical Identifier box and click Modify.

   b. Go to step 2.

   Or to add a new link to use:

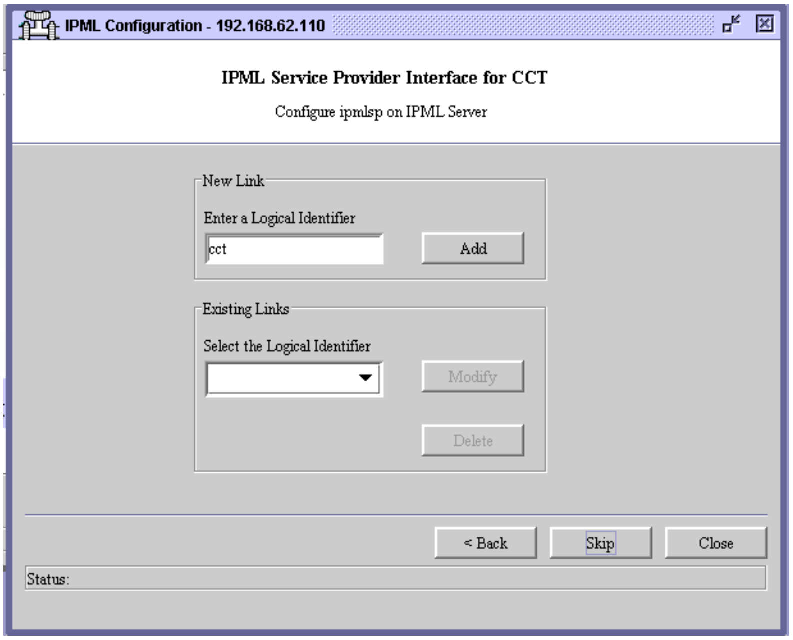
   a. Type a name in the Enter a Logical Identifier box and click Add.

   b. Go to step 2.

   Or if you do not need to make changes to a link or add a new one, click the Skip button and go to the next task.

To remove an existing link, choose the link in the Select the Logical Identifier box and click Delete.

If there is no existing link available, the default entry in the Logical Identifier field will be ‘`cct`’. A new link can be created by clicking the Add button.



IPML Configuration - 192.168.62.110

IPML Service Provider Interface for CCT

Configure ipmlsp on IPML Server

New Link

Enter a Logical Identifier: cct

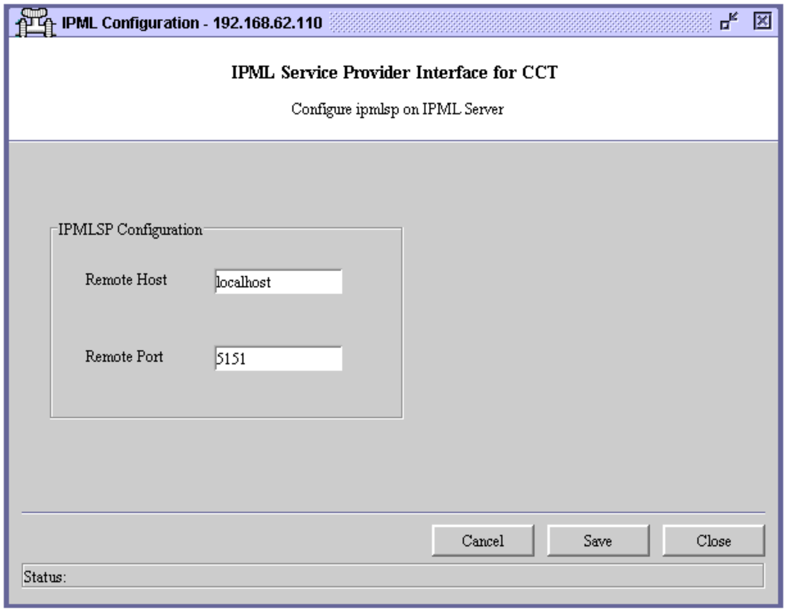
Existing Links

Select the Logical Identifier:

Status:

2. Enter information in the window using the following table

| Field | Explanation |
|---|---|
| Remote Host | The host name of the CCT Server |
| Remote Port | The listening port of the CCT Server |


IPML Configuration - 192.168.62.110
IPML Service Provider Interface for CCT
Configure ipmlsp on IPML Server
IPMLSP Configuration
Cancel
Save
Close
Status:

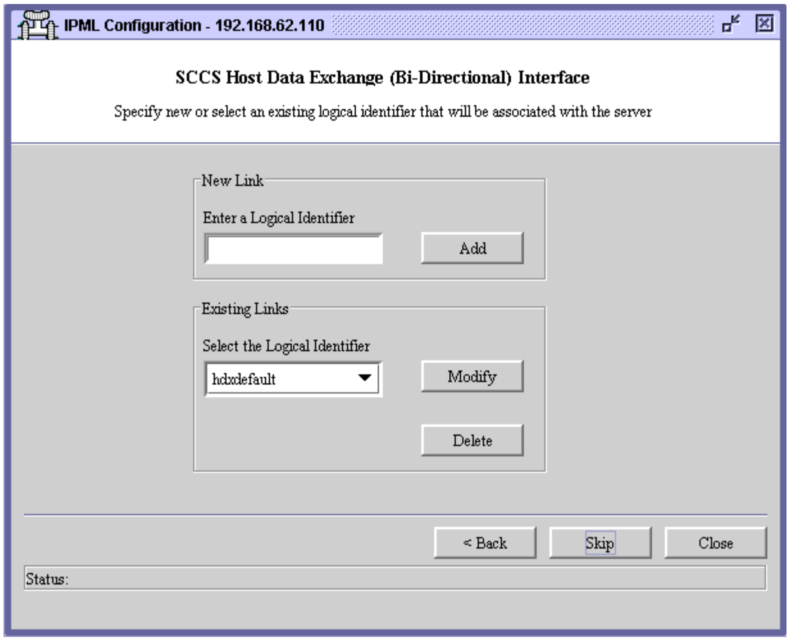
Remote Host: localhost

Remote Port: 5151

## SCCS Host Data Exchange (Bi-Directional) Interface

Use these windows to specify the new or existing HDX link server to associate with the Symposium Call Center Server.

These windows appear only if you are configuring the IPML SCCS Integration package.



IPML Configuration - 192.168.62.110

SCCS Host Data Exchange (Bi-Directional) Interface

Specify new or select an existing logical identifier that will be associated with the server

Select the Logical Identifier: hdxdefault

Status:

1. To use an existing link:

   a. Choose the link in the Select the Logical Identifier box and click Modify.

   b. Go to step 2.

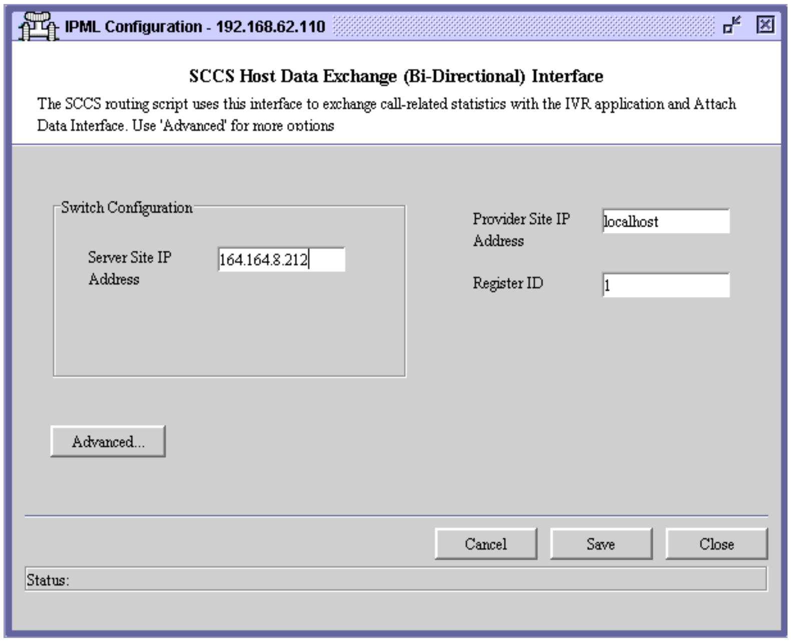
   Or to add a new link to use:

   a. Type a name in the Enter a Logical Identifier box and click Add.

   b. Go to step 2.

   Or if you do not need to make changes to a link or add a new one, click the Skip button and go to the next task.

☞ To remove an existing link, choose the link in the Select the Logical Identifier box and click Delete**.**


IPML Configuration - 192.168.62.110

SCCS Host Data Exchange (Bi-Directional) Interface

The SCCS routing script uses this interface to exchange call-related statistics with the IVR application and Attach Data Interface. Use 'Advanced' for more options

Switch Configuration

Server Site IP Address: 164.164.8.212

Provider Site IP Address: localhost

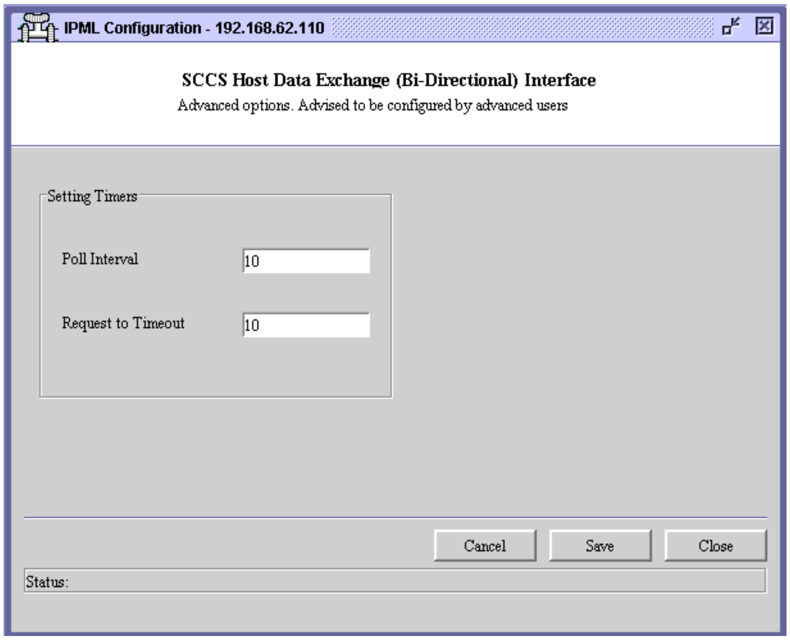
Register ID: 1

Status:

**2.** Enter information in the window using the following table

| Field | Explanation |
|---|---|
| Server Site IP Address | The IP address of the Telephony Link Server. |
| Provider Site IP Address | The PBX M1 machine name. Default is SL16. |
| Register ID | Usually the name of the Telephony Link Server. |

3. Click the Advanced... button.



IPML Configuration - 192.168.62.110

SCCS Host Data Exchange (Bi-Directional) Interface

Advanced options. Advised to be configured by advanced users

Setting Timers

Poll Interval: 10

Request to Timeout: 10

Status:

4. Enter information in the window using the following table, then click the Save button.

| Field | Explanation |
|---|---|
| Poll Interval | Number of seconds to wait between polls. Allows values 10 through 120. |
| Request to Timeout | Number of seconds before a request times out. Allows values 10 through 300. |

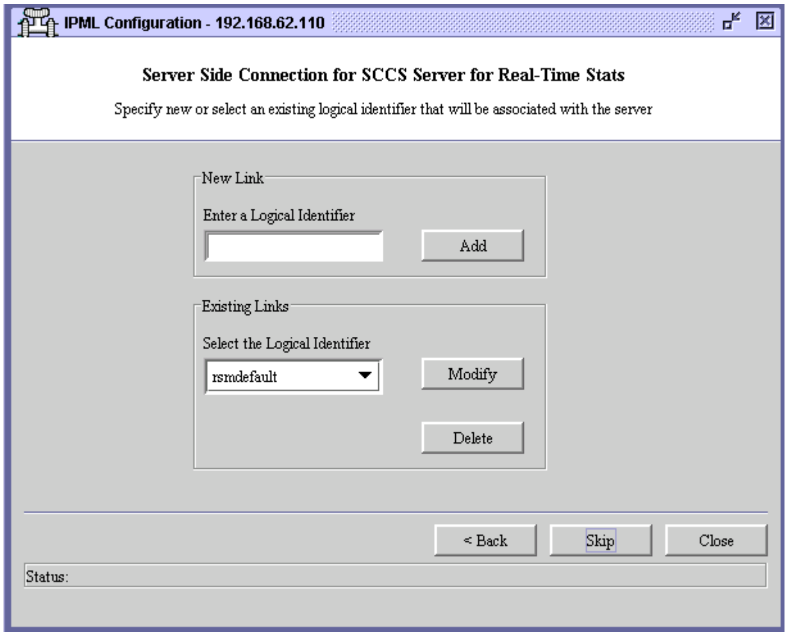
5. Click the Save button again.

6. If you need to enter another HDX link server, repeat steps 1 through 5. Otherwise, click the Next button.

## Server Side Connection for SCCS Server for Real-Time Stats

Use these windows to specify the new or existing CSRSM link server to associate with the Symposium Call Center Server.

☞ These windows appear only if you are configuring the IVR SCCS Integration package.



IPML Configuration - 192.168.62.110
Server Side Connection for SCCS Server for Real-Time Stats
Specify new or select an existing logical identifier that will be associated with the server
New Link
Enter a Logical Identifier
Add
Existing Links
Select the Logical Identifier
rsmdefault
Modify
Delete
< Back
Skip
Close
Status:

To use an existing link:

**a.** Choose the link in the Select the Logical Identifier box and click Modify.

**b.** Go to step 2.

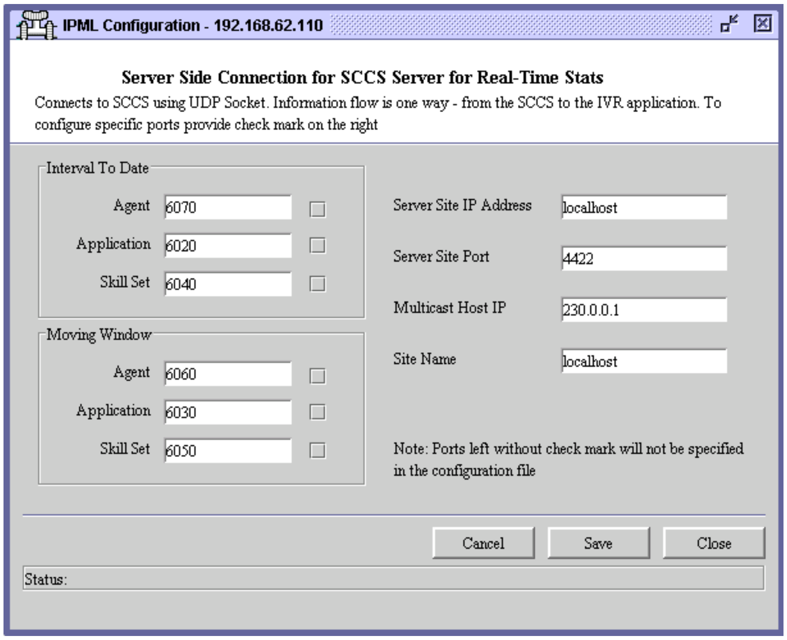
Or to add a new link to use:

**a.** Type a name in the Enter a Logical Identifier box and click Add.

**b.** Go to step 2.

Or if you do not need to make changes to a link or add a new one, click the Skip button and go to the next task.

To remove an existing link, choose the link in the Select the Logical Identifier box and click Delete.



IPML Configuration - 192.168.62.110

**Server Side Connection for SCCS Server for Real-Time Stats**

Connects to SCCS using UDP Socket. Information flow is one way - from the SCCS to the IVR application. To configure specific ports provide check mark on the right

Interval To Date

| | | |
|---|---|---|
| Agent | 6070 | □ |
| Application | 6020 | □ |
| Skill Set | 6040 | □ |

Moving Window

| | | |
|---|---|---|
| Agent | 6060 | □ |
| Application | 6030 | □ |
| Skill Set | 6050 | □ |

| | |
|---|---|
| Server Site IP Address | localhost |
| Server Site Port | 4422 |
| Multicast Host IP | 230.0.0.1 |
| Site Name | localhost |

Note: Ports left without check mark will not be specified in the configuration file

Status:

1. Enter information in the window using the following table. For each statistic to retrieve from a port, put a check in the box next to it and enter the Symposium Server port number.

| Field | Explanation |
|---|---|
| Interval To Date | |
| Agent | Port number where the server sends cumulative statistics about the agent. |
| Application | Port number where the server sends cumulative statistics about the application. |
| Skill Set | Port number where the server sends cumulative statistics about the skillset. |
| Moving Window | |
| Agent | Port number where the server sends statistics about the agent over the period set in Symposium. |
| Application | Port number where the server sends statistics about the application over the period set in Symposium. |
| Skill Set | Port number where the server sends statistics about the skillset over the period set in Symposium. |
| Server Site IP Address | The IP address of the SCCS server. |

| | |
|---|---|
| Server Site Port | The SCCS server port that receives statistics. |
| Multicast Host IP | The IP address of the multicast group. |
| Site Name | The PBX M1 machine name. |
| Remote ORB | The CORBA lookup application to use, either Orbix or Visibroker. |

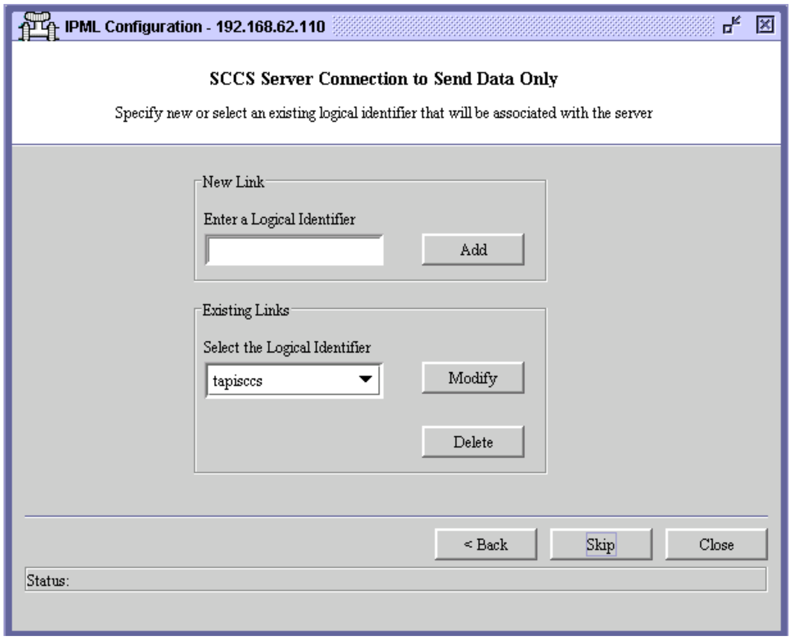
**2.** Click Save to keep your changes.

**3.** If you need to enter another CSRSM link server, repeat steps 1 through 3. Otherwise, click the Next button.

## SCCS Server Connection to Send Data Only

Use these windows to specify the new or existing TAPI link server to associate with the Symposium Call Center Server.

These windows appear if you are configuring the IVR SCCS Integration package.



IPML Configuration - 192.168.62.110

SCCS Server Connection to Send Data Only

Specify new or select an existing logical identifier that will be associated with the server

Select the Logical Identifier: tapisccs

Status:

1. To use an existing link:

   a. Choose the link in the Select the Logical Identifier box and click Modify.

   b. Go to step 2.

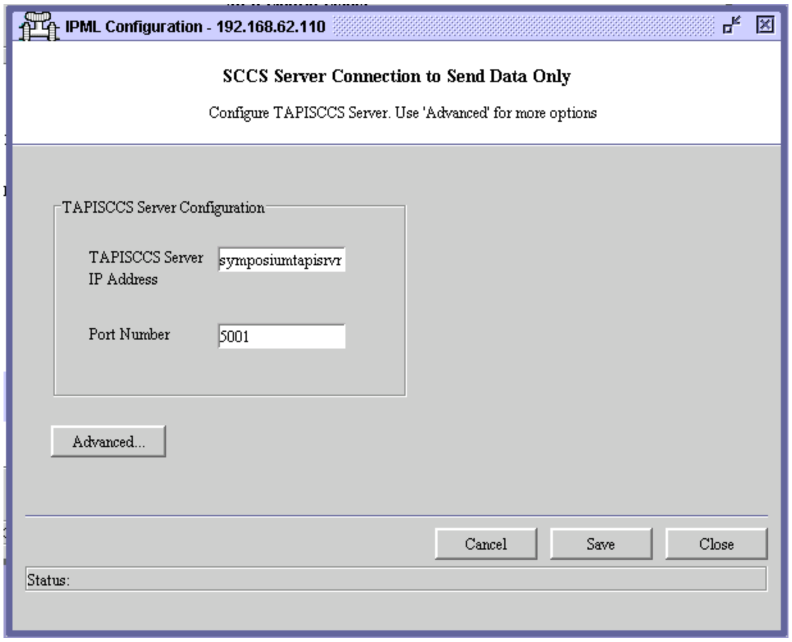
   Or to add a new link to use:

   a. Type a name in the Enter a Logical Identifier box and click Add.

   b. Go to step 2.

   Or if you do not need to make changes to a link or add a new one, click the Skip button and go to the next task.

**To remove an existing link, choose the link in the Select the Logical Identifier box and click Delete.**


IPML Configuration - 192.168.62.110
TAPISCCS Server Configuration
Advanced...
Cancel
Save
Close

SCCS Server Connection to Send Data Only

Configure TAPISCCS Server. Use 'Advanced' for more options

TAPISCCS Server IP Address: symposiumtapisrvr

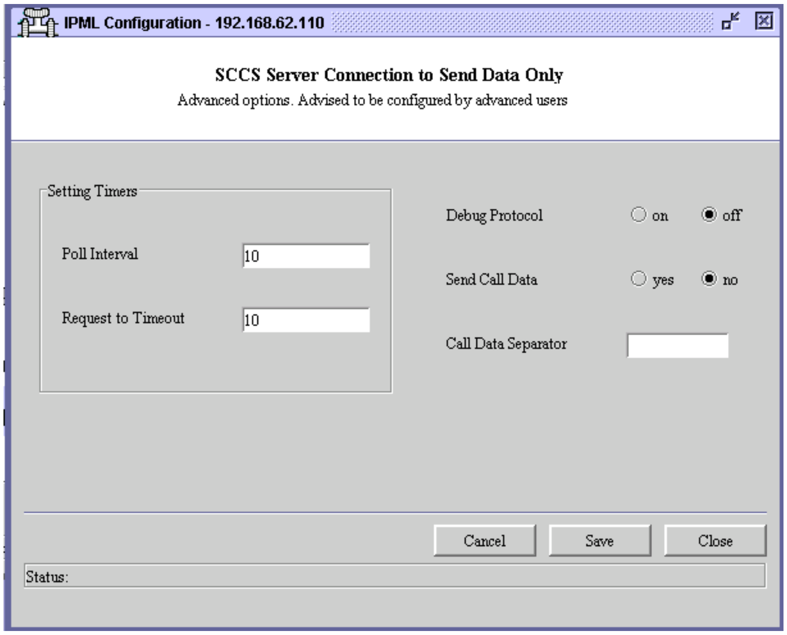
Port Number: 5001

Status:

2. Enter information in the fields using the following table.

| Field | Explanation |
|---|---|
| TAPISCCS Server IP Address | Name of TAPI link server running on the socket. |
| Port Number | The TAPI link server connection port. |

**3.** Click the Advanced... button.



IPML Configuration - 192.168.62.110

SCCS Server Connection to Send Data Only

Advanced options. Advised to be configured by advanced users

Setting Timers

Poll Interval 10

Request to Timeout 10

Debug Protocol ○ on ● off

Send Call Data ○ yes ● no

Call Data Separator

Status:

**4.** Enter information in the window using the following table, then click the Save button.

| **Field** | **Explanation** |
|---|---|
| Poll Interval | Number of seconds between polls (10-120). |
| Request to Timeout | Number of seconds before the request times out (10-300). |
| Send Call Data | Yes sends both the calldata key and calldata value to the TAPI server. No sends only the calldata value to the TAPI server. |
| Call Data Separator | The character to use to separate call data key when sending data to the TAPI server. If you don’t want to separate call data with a delimiter, use 0 (zero). |

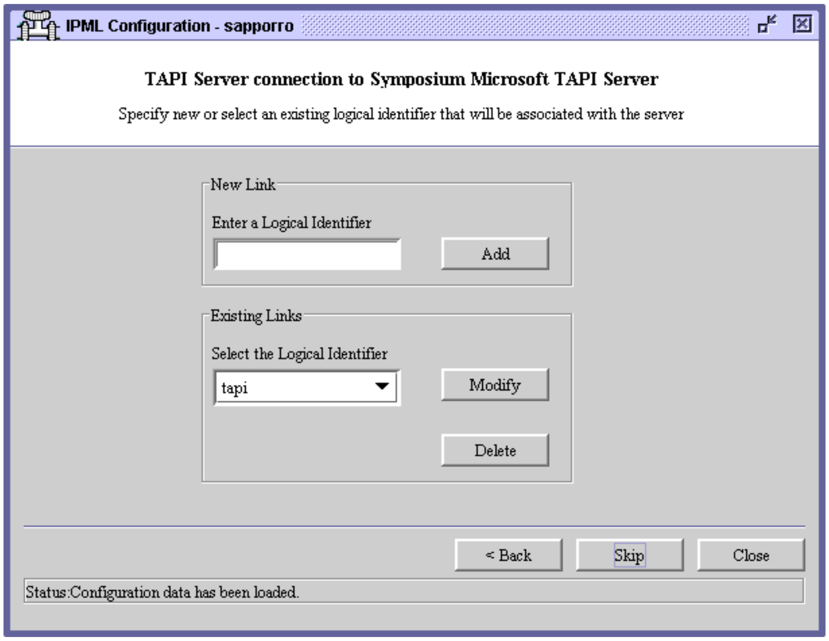
**5.** Click the Save button again.

**6.** If you need to enter another TAPI link server, repeat steps 1 through 5. Otherwise, click the Next button.

## TAPI Server Connection to Symposium Microsoft TAPI server

Use these windows to specify the new or existing Symposium Microsoft TAPI link server to associate with the TAPI Server.

☞ These windows appear if you are configuring the TAPI Integration.



IPML Configuration - sapporro

TAPI Server connection to Symposium Microsoft TAPI Server

Specify new or select an existing logical identifier that will be associated with the server

New Link

Enter a Logical Identifier

Existing Links

Select the Logical Identifier: tapi

Status:Configuration data has been loaded.

**1.** To use an existing link:

**a.** Choose the link in the Select the Logical Identifier box and click Modify.

**b.** Go to step 2.

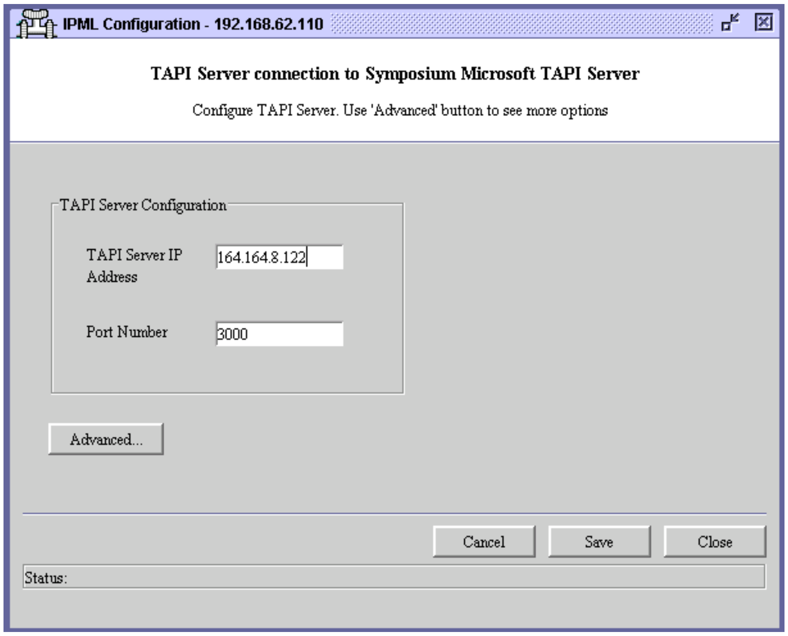
Or to add a new link to use:

**a.** Type a name in the Enter a Logical Identifier box and click Add.

**b.** Go to step 2.

Or if you do not need to make changes to a link or add a new one, click the Skip button and go to the next task.

☞ **To remove an existing link, choose the link in the Select the Logical Identifier box and click Delete.**


IPML Configuration - 192.168.62.110

TAPI Server connection to Symposium Microsoft TAPI Server

Configure TAPI Server. Use 'Advanced' button to see more options

TAPI Server Configuration

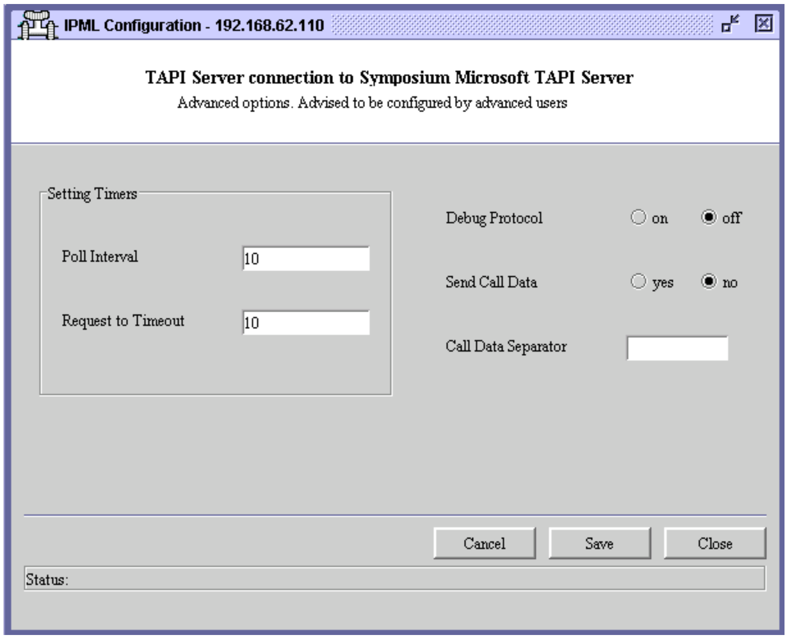
TAPI Server IP Address: 164.164.8.122

Port Number: 3000

**2.** Enter information in the window using the following table.

| Field | Explanation |
|---|---|
| TAPI Server IP Address | The host name of the telephony link server running on the socket. |
| Port Number | The listening port of the TAPI server. |

**3.** Click Advanced...



IPML Configuration - 192.168.62.110

TAPI Server connection to Symposium Microsoft TAPI Server

Advanced options. Advised to be configured by advanced users

Setting Timers

Poll Interval: 10

Request to Timeout: 10

Debug Protocol ○ on ● off

Send Call Data ○ yes ● no

Call Data Separator:

**4.** Enter information in the window using the following table, the click Save.

| **Field** | **Explanation** |
|---|---|
| Poll Interval | Number of seconds between polls (10-120) |
| Request to Timeout | Number of seconds before the request times out (10-300) |
| Send Call Data | Yes sends both the calldata key and calldata value to the TAPI server. No sends only the calldata value to the TAPI server. |
| Call Data Separator | The character to use to separate call data key when sending data to the TAPI server. If you don't want to separate call data with a delimiter, use 0 (zero). |

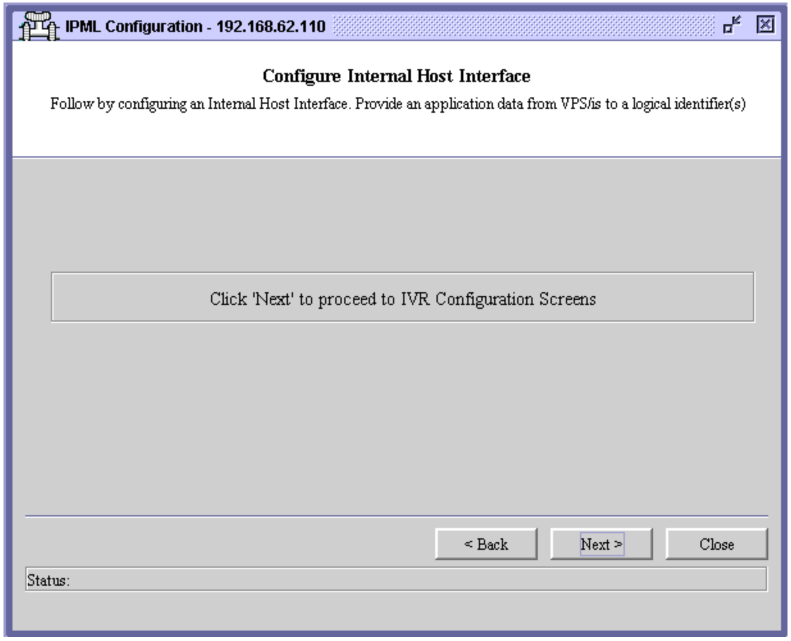
**5.** Click Save again.

**6.** If you need to enter another Symposium Microsoft TAPI link server, repeat steps 1 through 5. Otherwise, click the Next button.

## CTI Connection to the IVR

Use these window to add or modify connections from CTI to the IVR.

☞ These windows always appear, since they are used to configure the required base package.

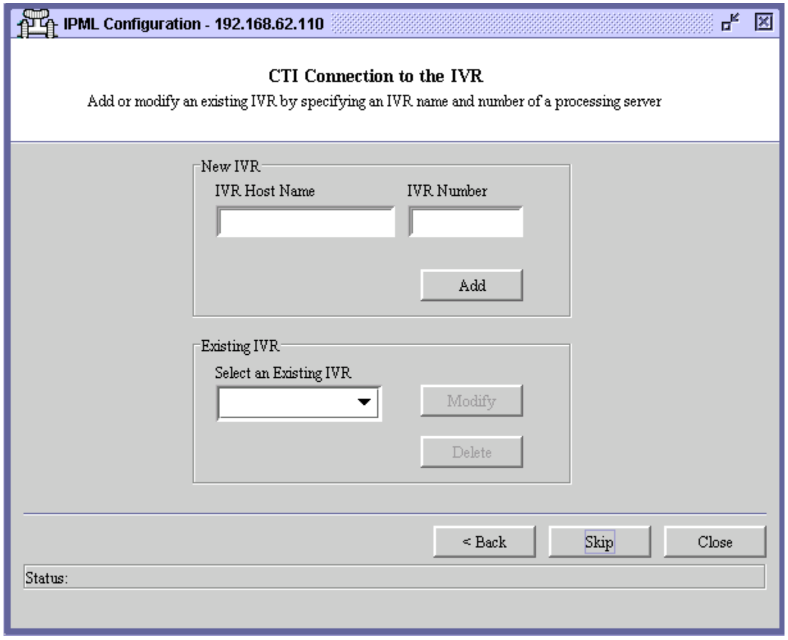


Configure Internal Host Interface

Follow by configuring an Internal Host Interface. Provide an application data from VPS/is to a logical identifier(s)

Click 'Next' to proceed to IVR Configuration Screens

1. In the Configure Internal Host Interface window, click the Next button.



CTI Connection to the IVR

Add or modify an existing IVR by specifying an IVR name and number of a processing server

**2.** To use an existing IVR:

**a.** Choose the link in the Select the Existing IVR box and click Modify.

**b.** Go to step 2.

Or to add a new IVR to use:

**a.** In the IVR Hostname box, type the name of the provider application used when communication is initiated.

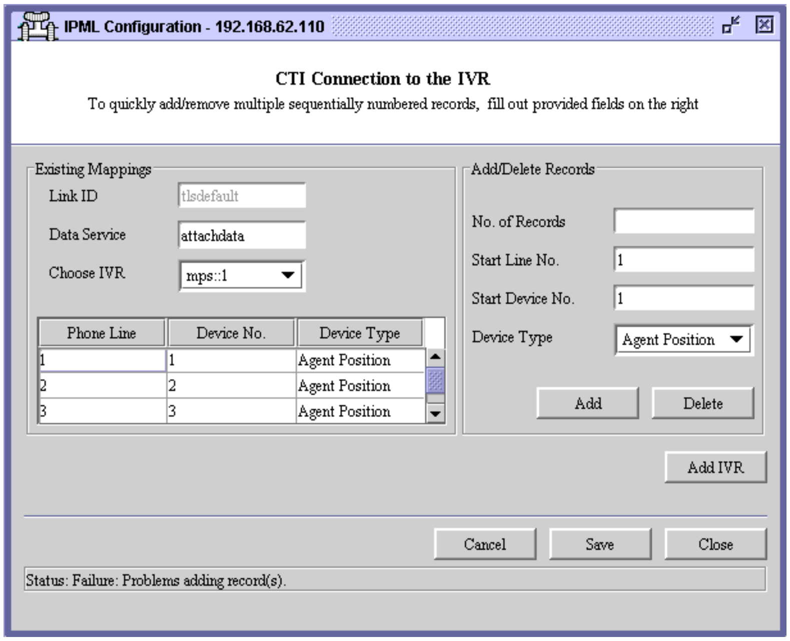
**b.** In the IVR Number box, type the number that identifies this IVR.

**c.** Click Add.

**d.** Go to step 2.

Or if you do not need to make changes to an IVR or add a new one, click the Skip button and go to the next task.

To remove an existing link, choose the IVR in the Select an Existing IVR box and click Delete**.**



IPML Configuration - 192.168.62.110

**CTI Connection to the IVR**

To quickly add/remove multiple sequentially numbered records, fill out provided fields on the right

Existing Mappings

Link ID: tlsdefault

Data Service: attachdata

Choose IVR: mps::1

| Phone Line | Device No. | Device Type |
|---|---|---|
| 1 | 1 | Agent Position |
| 2 | 2 | Agent Position |
| 3 | 3 | Agent Position |

Add/Delete Records

No. of Records:

Start Line No.: 1

Start Device No.: 1

Device Type: Agent Position

Status: Failure: Problems adding record(s).

**3.** Choose the IVR in the IVR drop-down box.

4. To add a device, enter the following information in the window and click Add.

| Field/Button | Explanation |
|---|---|
| No. of Records | The number of devices that will be entered into the table. |
| Start Line No. | The starting phone line number. |
| Start Device No. | The starting device number. |
| Device Type | Sets device type for the registered device. |

You can also quickly add or change information by typing directly in the grid in the Existing Mappings area.

5. To delete a device, enter the following information in the window and click Delete.

| Field/Button | Explanation |
|---|---|
| No. of Records | The number of devices that will be removed from the table. |
| Start Line No. | The starting phone line number. |
| Start Device No. | The starting device number. |
| Device Type | Sets device type for the registered device. |

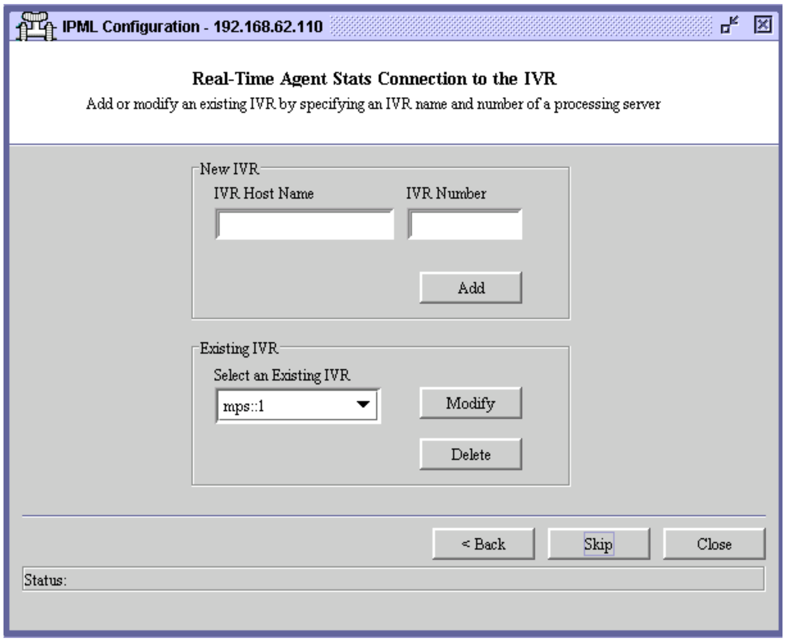
You can also quickly remove records by clicking the record in the grid and clicking Delete.

6. To add another IVR, click the Add IVR button and repeat steps 2 and 3. Otherwise, click the Save or Finish button.

## Real-Time Agent Stats Connection to the IVR

Use these windows to add or modify connections from CSRSM to the IVR.

These windows will appear if you are configuring the IVR SCCS Integration package.



IPML Configuration - 192.168.62.110

Real-Time Agent Stats Connection to the IVR

Add or modify an existing IVR by specifying an IVR name and number of a processing server

Select an Existing IVR: mps::1

Status:

1. To use an existing IVR:

   a. Choose the link in the Select the Existing IVR box and click Modify.

   b. Go to step 2.

   Or to add a new IVR to use:

   a. In the IVR Hostname box, type the name of the provider application used when communication is initiated.

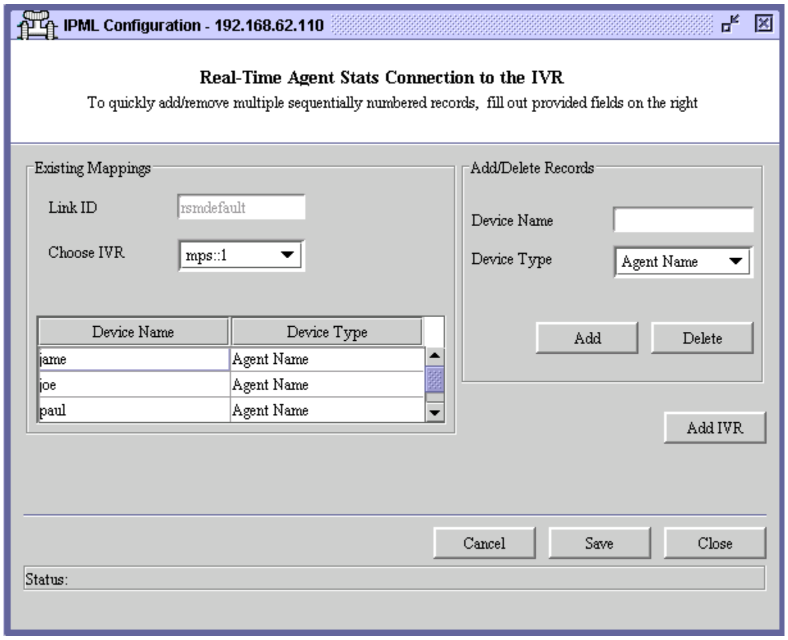
   b. In the IVR Number box, type the number that identifies this IVR.

   c. Click Add.

   d. Go to step 2.

   Or if you do not need to make changes to an IVR or add a new one, click the Skip button and go to the next task.

**To remove an existing link, choose the IVR in the Select an Existing IVR box and click Delete.**



IPML Configuration - 192.168.62.110

**Real-Time Agent Stats Connection to the IVR**

To quickly add/remove multiple sequentially numbered records, fill out provided fields on the right

Existing Mappings

Link ID: rsmdefault

Choose IVR: mps::1

| Device Name | Device Type |
|---|---|
| jame | Agent Name |
| joe | Agent Name |
| paul | Agent Name |

Add/Delete Records

Device Name:

Device Type: Agent Name

Status:

2. Choose the IVR in the IVR drop-down box.

3. To add a record, enter the following information in the window and click Add.

| Field/Button | Explanation |
|---|---|
| Device Name | The name for the device. |
| Device Type | The device type for the registered device. |

   You can also quickly add or change information by typing directly in the grid in the Existing Mappings area.

4. To delete a record, enter the following information in the window and click Delete.

| Field/Button | Explanation |
|---|---|
| Device Name | The name of the device to remove. |
| Device Type | The device type to remove. |

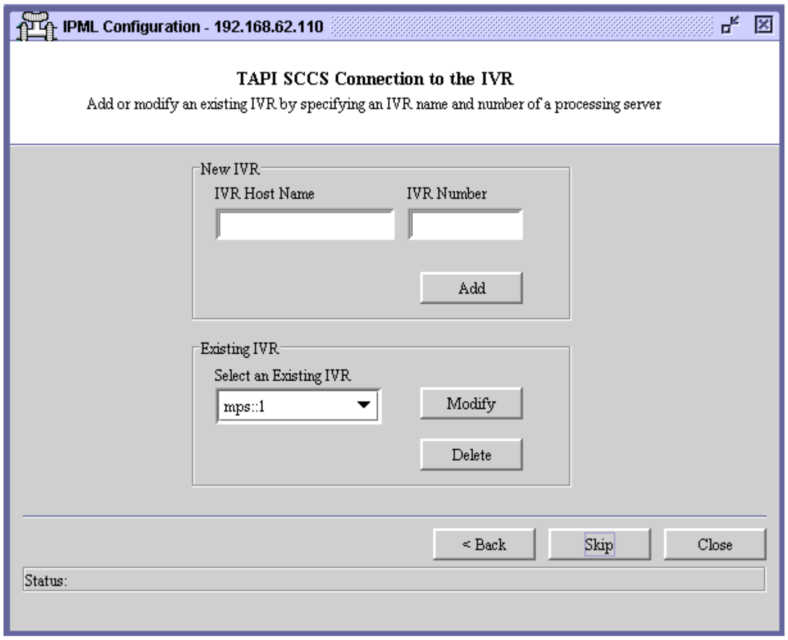
   You can also quickly remove records by clicking the record in the grid and clicking Delete.

5. To add another IVR, click the Add IVR button and repeat steps 2 and 3. Otherwise, click the Save button.

## TAPI SCCS Connection to the IVR

Use these windows to add or modify connections from CSTAPI to the IVR.

These windows appear if you are configuring the IVR SCCS Integration package.



TAPI SCCS Connection to the IVR

Add or modify an existing IVR by specifying an IVR name and number of a processing server

Select an Existing IVR: mps::1

Status:

1. To use an existing IVR:

    a. Choose the link in the Select the Existing IVR box and click Modify.

    b. Go to step 2.

    Or to add a new IVR to use:

    a. In the IVR Hostname box, type the name of the provider application used when communication is initiated.

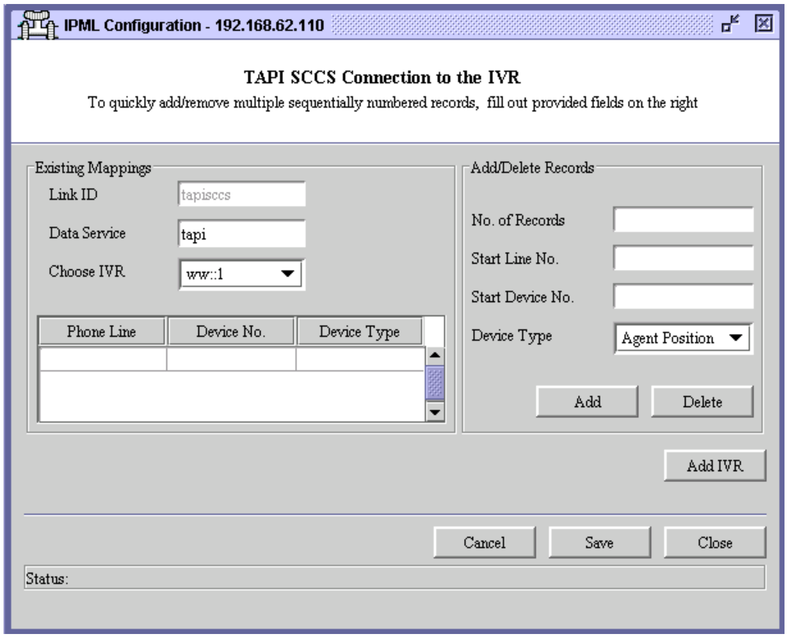
    b. In the IVR Number box, type the number that identifies this IVR.

    c. Click Add.

    d. Go to step 2.

    Or if you do not need to make changes to an IVR or add a new one, click the Skip button and go to the next task.

To remove an existing link, choose the IVR in the Select an Existing IVR box and click Delete.



IPML Configuration - 192.168.62.110

**TAPI SCCS Connection to the IVR**

To quickly add/remove multiple sequentially numbered records, fill out provided fields on the right

Existing Mappings

Link ID: tapisccs

Data Service: tapi

Choose IVR: ww::1

| Phone Line | Device No. | Device Type |
|---|---|---|
| | | |

Add/Delete Records

No. of Records:

Start Line No.:

Start Device No.:

Device Type: Agent Position

Status:

2. Choose the IVR in the IVR drop-down box.

3. To add a device, enter the following information in the window and click Add.

| Field/Button | Explanation |
|---|---|
| No. of Records | The number of devices that will be entered into the table. |
| Start Line No. | The starting phone line number. |
| Start Device No. | The starting device number. |
| Device Type | Sets device type for the registered device. |

   You can also quickly add or change information by typing directly in the grid in the Existing Mappings area.

4. To delete a device, enter the following information in the window and click Delete.

| Field/Button | Explanation |
|---|---|
| No. of Records | The number of devices that will be removed from the table. |
| Start Line No. | The starting phone line number. |
| Start Device No. | The starting device number. |
| Device Type | Sets device type for the registered device. |

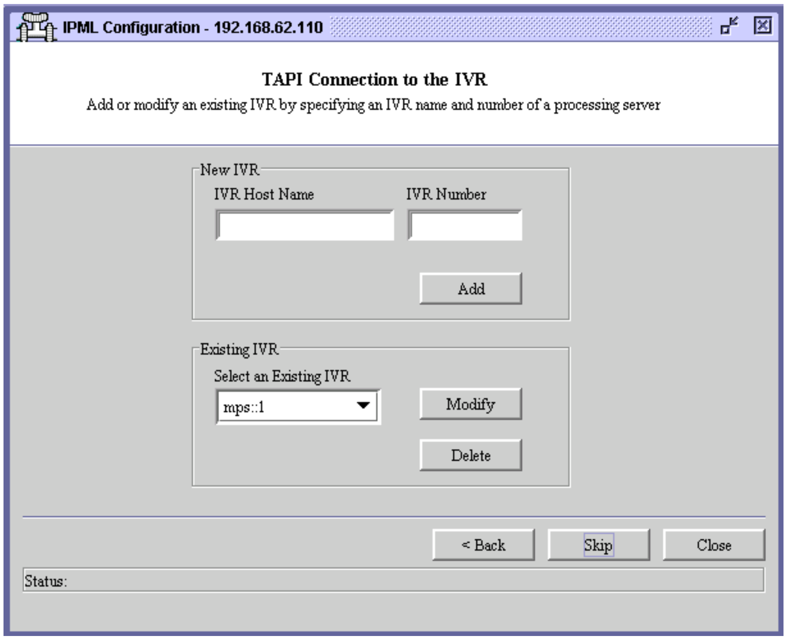
   You can also quickly remove records by clicking the record in the grid and clicking Delete.

5. To add another IVR, click the Add IVR button and repeat steps 2 and 3. Otherwise, click the Save or Finish button.

## TAPI Connection to the IVR

Use this window to add or modify connections from CSTAPI to the IVR.

These windows appear if you are configuring the TAPI Integration.



IPML Configuration - 192.168.62.110

TAPI Connection to the IVR

Add or modify an existing IVR by specifying an IVR name and number of a processing server

Select an Existing IVR: mps::1

Status:

1. To use an existing IVR:

   a. Choose the link in the Select the Existing IVR box and click Modify.

   b. Go to step 2.

   Or to add a new IVR to use:

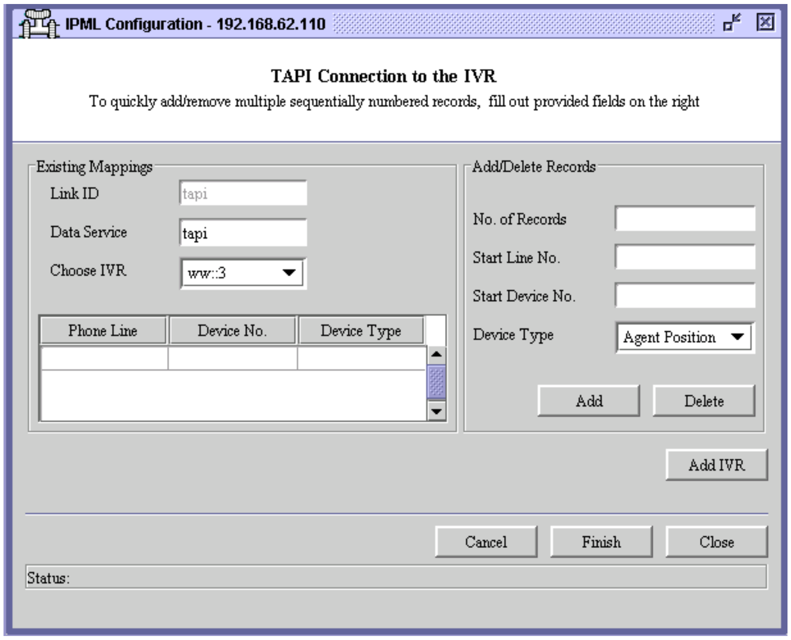
   a. In the IVR Hostname box, type the name of the provider application used when communication is initiated.

   b. In the IVR Number box, type the number that identifies this IVR.

   c. Click Add.

   d. Go to step 2.

Or to remove an existing link, choose the link in the Select the Logical Identifier box and click Delete.



IPML Configuration - 192.168.62.110

TAPI Connection to the IVR

To quickly add/remove multiple sequentially numbered records, fill out provided fields on the right

Existing Mappings

Link ID: tapi

Data Service: tapi

Choose IVR: ww::3

| Phone Line | Device No. | Device Type |
|---|---|---|

Add/Delete Records

No. of Records:

Start Line No.:

Start Device No.:

Device Type: Agent Position

Status:

2. Choose the IVR in the IVR drop-down box.
3. To add a device, enter the following information in the window and click Add.

| Field/Button | Explanation |
|---|---|
| No. of Records | The number of devices that will be entered into the table. |
| Start Line No. | The starting phone line number. |
| Start Device No. | The starting device number. |
| Device Type | Sets device type for the registered device. |

You can also quickly add or change information by typing directly in the grid in the Existing Mappings area.

4. To delete a device, enter the following information in the window and click Delete.

| Field/Button | Explanation |
|---|---|
| No. of Records | The number of devices that will be removed from the table. |
| Start Line No. | The starting phone line number. |
| Start Device No. | The starting device number. |
| Device Type | Sets device type for the registered device. |

You can also quickly remove records by clicking the record in the grid and clicking Delete.

**5.** To add another IVR, click the Add IVR button and repeat steps 2 and 3. Otherwise, click the Save button.

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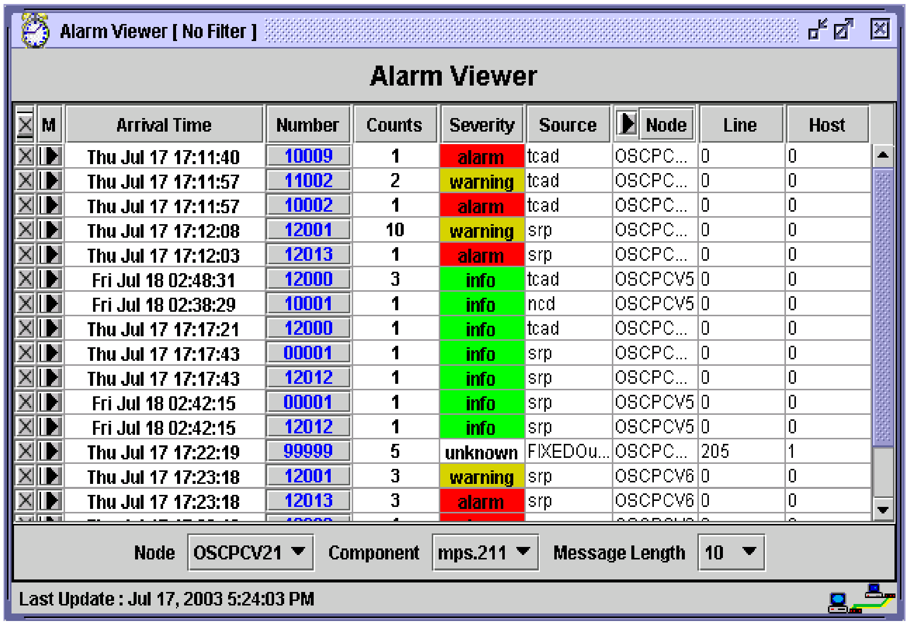
# 7

# Alarm Viewer

<u>This chapter covers:</u>

1. Introduction to the Alarm Viewer
2. Working in the Alarm Viewer
3. Source of Alarm Information
4. Alarm Viewer Window
5. View Live Alarms
6. Filter Alarms
7. Creating a Filter
8. Saving a Filter

## Introduction to the Alarm Viewer



Alarm Viewer [ No Filter ]

Alarm Viewer

| ☒ | M | Arrival Time | Number | Counts | Severity | Source | ▶ Node | Line | Host |
|---|---|---|---|---|---|---|---|---|---|
| ☒ | ▶ | Thu Jul 17 17:11:40 | 10009 | 1 | alarm | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:11:57 | 11002 | 2 | warning | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:11:57 | 10002 | 1 | alarm | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:12:08 | 12001 | 10 | warning | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:12:03 | 12013 | 1 | alarm | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:48:31 | 12000 | 3 | info | tcad | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:38:29 | 10001 | 1 | info | ncd | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:17:21 | 12000 | 1 | info | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:17:43 | 00001 | 1 | info | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:17:43 | 12012 | 1 | info | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:42:15 | 00001 | 1 | info | srp | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:42:15 | 12012 | 1 | info | srp | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:22:19 | 99999 | 5 | unknown | FIXEDOu... | OSCPC... | 205 | 1 |
| ☒ | ▶ | Thu Jul 17 17:23:18 | 12001 | 3 | warning | srp | OSCPCV6 | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:23:18 | 12013 | 3 | alarm | srp | OSCPCV6 | 0 | 0 |

Node OSCPCV21 ▼ Component mps.211 ▼ Message Length 10 ▼

Last Update : Jul 17, 2003 5:24:03 PM

Use the Alarm Viewer to view live and logged alarms. Alarms are predefined messages that either report a problem or display specific information about a situation. Alarm text messages display, as live alarms, in the Alarm Viewer window. These messages come from the alarm daemon (**alarmd**) that execute on the node to which the viewer is connected (one **alarmd** per node).

Logged alarms are messages that have been recorded in a file (default log file).

The Alarm Viewer tool displays live alarms and the system generated default alarm log files. You can apply filters to control the actual alarms that display in the viewer windows.

You can launch multiple viewers simultaneously. Alarm Viewer windows function independently of one another and provide for an array of separate viewing situations across the network. Each viewer can display either live alarms or alarm log files within an individually customized window environment.

Alarm messages are categorized as system alarms and user defined alarms. System alarms are predefined into numerically coded, unique conditions that have been assigned a severity level and stored in an alarm database. The category of user defined alarms contain site specific messages which you can create in compliance with a specific format and add to the alarm database.

Each alarm database is node-specific and is managed by the Alarm Manager utility (**alm**), which is accessible directly from the VSH tool. Each node's alarm database resides in the following locations.

Solaris: `$MPSHOME/common/etc`

Windows 2000:`%MPSHOME%\common\etc`

A node's alarm database should include all system alarms and all user-defined application alarms, which are specific to the node and to all applications assigned to process at the node.

There is one alarm daemon executing for each node. Each alarm daemon writes information to component-specific alarm log files. For example, alarms for `MPS 107` would be written to `mps107`'s alarm log file. For additional information about alarm log files, see ***Source of Alarm Information*** on page 251.

Alarm Viewer windows continue to track activity, even while iconified. The iconified viewer alerts you to ongoing activity by displaying a flashing movement and by emitting a beeping (ringing) sound (if so configured). Further, the number of beeps (or rings) and the color of the alarm icon indicate the severity group of the alarm(s) being generated.

## Working with an Alarm Filter in the Alarm Viewer

When you launch an Alarm Viewer, you can apply an alarm filter.

There are two ways to apply an alarm filter:

- Implicitly: through the selections of TopologyTreeNode (Node, Component, or Process);
- Explicitly: define an alarm filter with Alarm Filter plug-in.

- **Define a filter with Alarm Filter plug-in:**

  Use the Alarm Filter to define an alarm filter for Alarm Viewer.

  You can apply an alarm filter with Alarm Viewer, so that, only the alarms passing the filter are shown in Alarm Viewer. Select the Alarm Filter button from the toolbar to define an alarm filter.

  Alternately, you can load a filter that is previously saved and then use it.

  For additional information about filtering alarms, see ***Filter Alarms*** on page 258.

- **Select Alarm Log Files:**

  Use the Choose Log button in the Alarm Filter window to select the Alarm Log files, which are to be viewed.

  You must select the specific alarm log files that you want to view before they will display in the view window.

- **View Alarms:**

  To view the alarm log files, use either of the following options:

  - Select the menu item Log Viewer from the Alarm Viewer menu.
  - Click the Choose Log button in the Log File section in the Alarm Filter.
  - When a log file is selected using one of the options mentioned above, the log data appears in a separate window. The Alarm Viewer presents only the live alarms, however, the stored alarm log is not presented in the Alarm Viewer GUI.
  - Default alarm log files in alarm filter are displayed in the order in which they are selected in the Logged Alarms Filter.

## Source of Alarm Information

The Alarm Viewer receives alarm text messages from alarm daemons (**alarmd**) that execute on nodes to which the Viewer is currently connected. Alarm daemons are node-specific. A single alarm daemon collects alarm information for all alarms generated on a node.

This information is then written to component-specific default alarm log files for the components that reside on the node. For additional information about alarm log files, see ***Default Alarm Log Files*** on page 251.

Alarm definitions are stored in the alarm database, which is node-specific and should contain alarms for all components configured for the node. Each node's alarm database resides in the following locations.

Solaris: `$MPSHOME/common/etc`

Windows 2000:`%MPSHOME%\common\etc`

Live alarms display as they are received from alarm daemons (**alarmd**). Logged alarms display from the file in which they have been recorded.

The Alarm Viewer can display Live Alarms and the default Alarm Log Files. While live alarms display as they are received, you must select alarm log files for viewing before you can view them.

Use the View menu button to select the type of alarm log files to view. When logged alarms display, the log file path name is identified with the title of the Alarm Log File Viewer window.

### Live Alarms

Alarm text messages display as live alarms in the Alarm Viewer window, as they are received from the node-specific alarm daemons (**alarmd**) executing on the nodes to which the Viewer is connected.

Alarm Viewer can apply with an alarm filter so, only the live alarms that pass the filter will show in Alarm Viewer.

The information that is recorded in alarm log files is subject to the live alarm filtering properties that were in use during logging. You can view these files in the Alarm Log File Viewer window.

For additional information, see ***View Live Alarms*** on page 255.

### Default Alarm Log Files

A component-specific default alarm log file is automatically created by each component as part of the initial boot-up process. This file contains a continuous record of all alarms, for that component, that were collected by the node's alarm daemon (**alarmd**).

Alarms on a node log by **alarmd,** based on the severities of these alarms. There are three categories of alarm severities: `info, warning,` and `alarm`. Component-specific default alarm log files are named in the following format:

Syntax:

```
info.<component_type>.<component_number>.log
```

`warning.<component_type>.<component_number>.log`

`alarm.<component_type>.<component_number>.log`

Example:

Node `is9507` contains two components: `common` and `mps107`.

- Alarms specific to the `common` component are written to `alarm.common.0.log.`
- Alarms specific to the `mps107` component are written to `alarm.mps.107.log.`

Alarm log files reside in the following locations:

Solaris: `$MPSHOME/common/log`

Windows 2000:`%MPSHOME%\common\log`

Initially, when the default alarm log file reaches its preconfigured file size limit, a default alarm log backup file is created to provide extended storage for alarm information. There is only one backup file for each component-specific log file. When alarm information is written to a backup file that contains alarms, the alarm information will be purged to make room for the more current alarm information. You can choose to view backup default alarm log files along with the default log files that you select.

Component-specific alarm log backup files are named in the format:

Syntax:

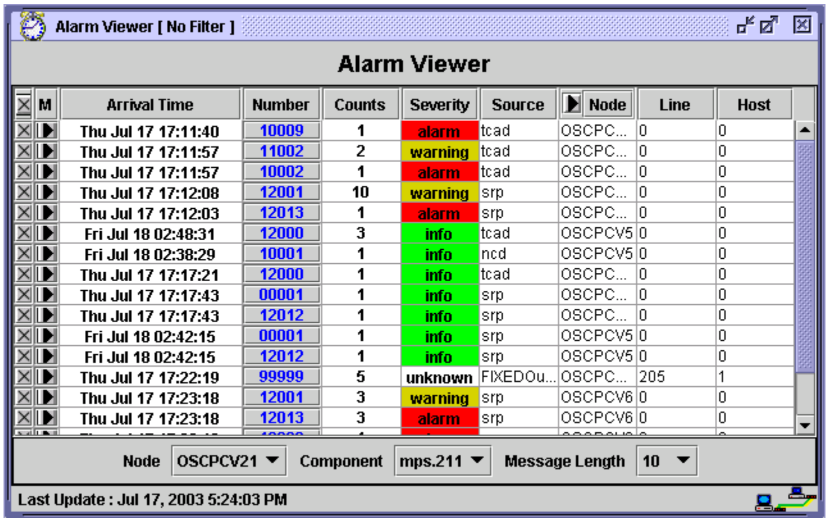
`alarm.<component_type>.<component_number>.log.bak`

Example:

- `mps107` alarm log file: `alarm.mps.107.log`
- `mps107` backup alarm log file: `alarm.mps.107.log.bak`

## Alarm Viewer Window

Alarm information displays in the Alarm Viewer window.



Alarm Viewer [ No Filter ]

Alarm Viewer

| ☒ | M | Arrival Time | Number | Counts | Severity | Source | ▶ Node | Line | Host |
|---|---|---|---|---|---|---|---|---|---|
| ☒ | ▶ | Thu Jul 17 17:11:40 | 10009 | 1 | alarm | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:11:57 | 11002 | 2 | warning | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:11:57 | 10002 | 1 | alarm | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:12:08 | 12001 | 10 | warning | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:12:03 | 12013 | 1 | alarm | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:48:31 | 12000 | 3 | info | tcad | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:38:29 | 10001 | 1 | info | ncd | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:17:21 | 12000 | 1 | info | tcad | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:17:43 | 00001 | 1 | info | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:17:43 | 12012 | 1 | info | srp | OSCPC... | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:42:15 | 00001 | 1 | info | srp | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Fri Jul 18 02:42:15 | 12012 | 1 | info | srp | OSCPCV5 | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:22:19 | 99999 | 5 | unknown | FIXEDOu... | OSCPC... | 205 | 1 |
| ☒ | ▶ | Thu Jul 17 17:23:18 | 12001 | 3 | warning | srp | OSCPCV6 | 0 | 0 |
| ☒ | ▶ | Thu Jul 17 17:23:18 | 12013 | 3 | alarm | srp | OSCPCV6 | 0 | 0 |

Node OSCPCV21 ▼ Component mps.211 ▼ Message Length 10 ▼

Last Update : Jul 17, 2003 5:24:03 PM

## Alarm Information

Alarm information includes the name of the process generating the alarm; the Alarm Number (code) and its Severity Level; Alarm Message Text; the Date and Time of alarm generation; and, when applicable the Component Identifier, Host Name and Phone Line Number. The type of information that actually displays in this window is controlled in the Alarm Filter.

### Data Format

#### Live Alarms

The Alarm Viewer window displays live alarm information in column and row format. Alarm message text displays directly below the alarm's data line. When a data element is not relevant to the alarm being defined, the system displays undefined as a column place holder. The severity is classified as: information (info), warning and alarm. The severity levels are assigned with the numbers from one (1) to nine (9).

- Alarms with severity levels from one to three belong to the information (info) category.
- Alarms with severity levels from four to six belong to the warning category.
- Alarms with severity levels from seven to nine belong to the alarm category.

#### Alarm Log Files

The Alarm Viewer window displays alarm information from default alarm log files in the format in which it exists in the file. This data format can not be modified.

### Source of Alarm Information

Alarm information originates as either live or logged alarms. Live alarms display as they are generated in the Alarm Viewer window. Logged alarms are previously recorded alarm information, which is saved to a system default file that you can view later.

### Alarm Message Length

The Message Length indicates the number of alarm messages that PeriView keeps for each alarm. The default value of the Message Length is 10. However, it can range from 5 to 100 (the valid values are displayed in the combo-box.) Whenever, there is any change in the message length, it applies to all the alarms in the viewer. The Message Length also affects the number of alarm messages you can see when you click the ">" button on the left side of an alarm. At any point in time, the user can view at the most the number of alarm messages defined by the Message Length.

## View Live Alarms

When an alarm is generated on the node, the associated PeriView Data Provider receives this alarm from alarm daemon (**`alarmd`**). However, the PeriView Data Provider will cache the alarms received from **`alarmd`** and send alarm updates to AlarmViewer at a configurable time interval (default is 5 seconds). If an alarm filter is applied, the associated PeriView Data Provider sends only those alarms that pass the filter.

Alarm information includes the name of the process generating the alarm; the Alarm Number (code) and its Severity Level; Alarm Message Text; the Date and Time of alarm generation; and, when applicable the Component Identifier, Host Name and Phone Line Number (when applicable).

☞ When a data element is not relevant to the alarm being defined, the system displays `undefined` in its place and serves as a column place holder to enhance readability.

**To view Live Alarms:**

Live alarms display in the Alarm Viewer window at the rate by which they are received. Alarms begin to display as soon as the Alarm Viewer window receives alarm data.

You can filter out unwanted alarms by applying an appropriate alarm filter (either defined using Alarm Filter or retrieved from a previously saved filter file.) For information about the Live Alarm Filter, see ***Filter Alarms*** on page 258.

You can only display alarm information; you can not edit it. For additional information, see ***Alarm Viewer Window*** on page 253.

- **When the connection to the component monitored by the Alarm Viewer is lost, message text displayed in the lower left side in the Viewer and an icon indicating the disconnection is displayed in the right side of the viewer.**

  The Alarm Viewer keeps trying to reestablish the connection to the monitored component. Once connection to the component is restored, message text displays in the Viewer and message area, and the flow of alarms resume in the Viewer window.

☞ During system and component shutdown/startup, some alarms may not be displayed in the Alarm Viewer. This results from the lost connection between the system/component alarm daemon and the PeriView Data Provider. To monitor alarms during a system shutdown/startup, start a command line shell on the system and use the **`alarm`** command line utility.

## View Default Alarm Log Files

All alarms that are generated from a node are collected by the node's alarm daemon and recorded in component-specific default alarm log files. Component-specific default alarm log files are automatically created during the initial system boot-up process.

When these default alarm log files, initially, reach their preconfigured file size limit, default alarm log backup files are created to provide extended storage for alarm information.

Each time a default alarm log file reaches its file size limit, its existing backup file information is overwritten with the newer information. You can select to filter and view these backup default alarm log files.

Each component is limited to a single default alarm log file and a single backup file. For additional information about default alarm log files, see ***Default Alarm Log Files*** on page 251.

Information from default alarm log files display in the Alarm Viewer window. The data displays in the same format as it exists in the actual file and the format can not be modified.

Alarm information includes the day, month, date, and time the alarm is generated; the process generating the alarm; the Alarm Number; Severity Level; and message text. When applicable, it will also include the Component Identifier, Phone Line Number, and Host Number.

You can only display alarm information; you can not edit it. For additional information, see ***Alarm Viewer Window*** on page 253.

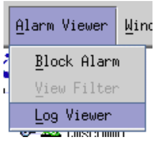
Although all alarms generated by a component are recorded in the default alarm log file, you can apply an alarm filter to an alarm log file, see ***Filtering Alarm Log Files*** on page 265.

The default alarm log file's logging process is not subject to filters. Filters apply only to the display of information contained in the file, not to the information that is recorded in the file.

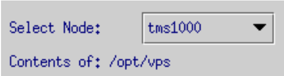
You can define an alarm filter directly from Alarm Filter or retrieve the filter from a previously saved filter file. For information about the Alarm Filter, see ***Filter Alarms*** on page 258.

**To View Alarm Log Files:**

1. To filter the alarm log output, select a node from the navigation pane. Only alarms from that node will display in the alarm log output. To display all alarms in a log file, select the default domain (Avaya) in the navigation pane.
2. Start the Alarm Viewer.
3. From the main menu, select Alarm Viewer > Log Viewer



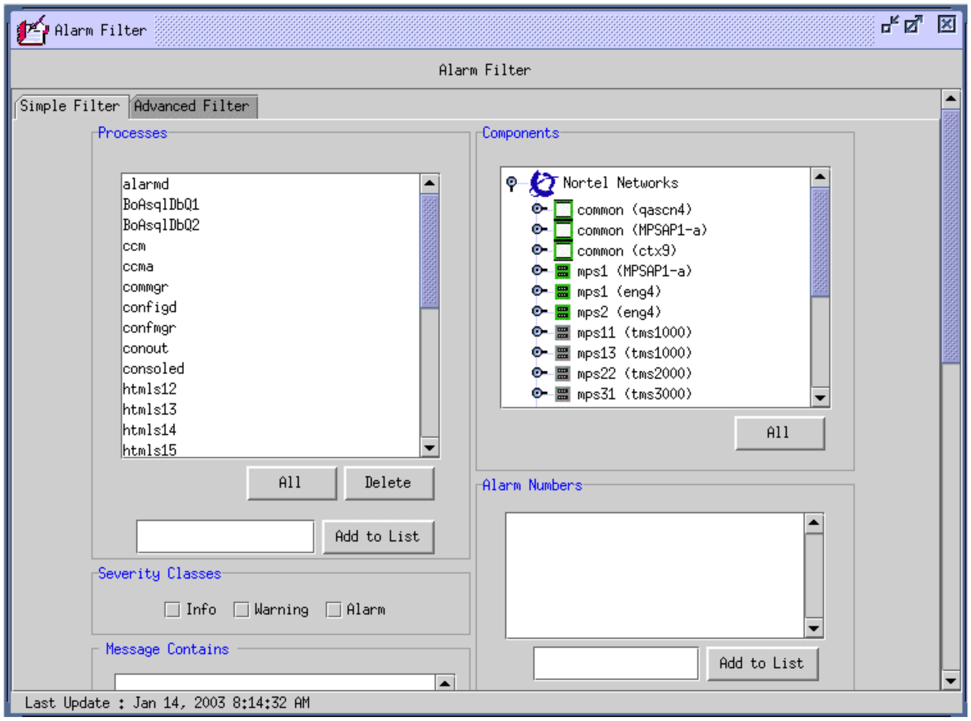
4. Select the node on which the alarm log file resides.


Select Node: tms1000

Contents of: /opt/vps

5. Select the desired node/component alarm log file (alarm log files are typically in `/$MPSHOME/common/log` for Solaris or `%MPSHOME%\common\etc` for Windows).

## Filter Alarms



alarmd
BoAsqlDbQ1
BoAsqlDbQ2
ccm
ccma
commgr
configd
confmgr
conout
consoled
htmls12
htmls13
htmls14
htmls15

Nortel Networks
- common (qascn4)
- common (MPSAP1-a)
- common (ctx9)
- mps1 (MPSAP1-a)
- mps1 (eng4)
- mps2 (eng4)
- mps11 (tms1000)
- mps13 (tms1000)
- mps22 (tms2000)
- mps31 (tms3000)

Last Update : Jan 14, 2003 8:14:32 AM

Use filters to control the alarms that display in the viewer window. Although you can view all live and logged alarms, you can specify the alarm information that actually displays in viewer windows by defining filtering properties (e.g. display alarms only from the specified nodes or components etc).

You can apply filters to both live and logged alarms. You define filtering properties at the Alarm Filter menu button.

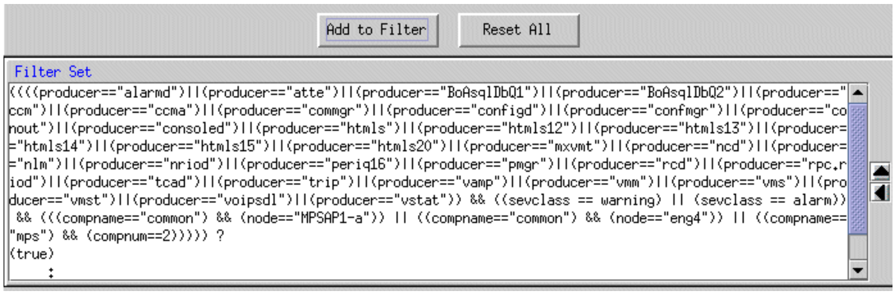
You can also save custom-made alarm filters for later use.

## Creating a Filter

There are two ways to define an alarm filter: Simple Filter or Advanced Filter. Simple filter is designed for most users' needs and can filter alarms by general alarm properties such as component, process, severity, and alarm number. Advanced Filter has more filtering parameters such as alarm frequency (number of times generated within a set time period), host number, and node. Advanced Filter also allows you to perform an action (a command which can be expressed on a single command line) when a specified alarm (condition) occurs.

### Simple Filter

To create a simple filter, select the desired filtering criteria and click the Add to Filter button. The filter statement appears in the Filter Set section of the window:



```
((((producer=="alarmd")||(producer=="atte")||(producer=="BoAsqlDbQ1")||(producer=="BoAsqlDbQ2")||(producer=="
ccm")||(producer=="ccma")||(producer=="commgr")||(producer=="configd")||(producer=="confmgr")||(producer=="co
nout")||(producer=="consoled")||(producer=="htmls")||(producer=="htmls12")||(producer=="htmls13")||(producer=
="htmls14")||(producer=="htmls15")||(producer=="htmls20")||(producer=="mxvmt")||(producer=="ncd")||(producer=
="nlm")||(producer=="nriod")||(producer=="periq16")||(producer=="pmgr")||(producer=="rcd")||(producer=="rpc.r
iod")||(producer=="tcad")||(producer=="trip")||(producer=="vamp")||(producer=="vmm")||(producer=="vms")||(pro
ducer=="vmst")||(producer=="voipsdl")||(producer=="vstat")) && ((sevclass == warning) || (sevclass == alarm))
 && (((compname=="common") && (node=="MPSAP1-a")) || ((compname=="common") && (node=="eng4")) || ((compname==
"mps") && (compnum==2))))) ?
(true)
    :
```

You can add multiple filter statements to create a filter set. To delete the most recent filter statement from the filter set, click the ◀ button. Click the ▲ button to clear all statements from the filter set.

#### Simple Filter Parameters

Hold down the Control key while clicking to select multiple items from a display list.

**Simple Filter Parameters Sheet 1 of 2**

| | |
|---|---|
| Processes | Filter by the process which generated the alarm. Some systems may use user-defined alarms which get generated by applications. If your system does this, put the application name into the text box and click on the “Add to List” button.<br>To filter by processes, select the processes from the list. If you have other processes (such as applications) which generate alarms and they are not on the list, add them to list by entering the process name in the text box and clicking on the Add to List button. |
| Components | Filter by the component(s) from which the alarm was generated. |

**Simple Filter Parameters Sheet 2 of 2**

| | | |
|---|---|---|
| Severity Class | Filter according to the severity of the alarm. | |
| | Info | Messages which typically indicate normal system functioning (severity levels 7-9) |
| | Warning | Messages which typically indicate unexpected or abnormal system functioning but do not necessarily mean that the system cannot function as expected (severity levels 4-6). |
| | Alarm | Messages which typically indicate a serious system failure that may impact its ability to function properly (severity levels 1-3). |
| Alarm Numbers | Filter according to alarm number. Each alarm is identified with a unique alarm number. (The range for system alarms is 00000-89999. The range for application alarms is 90000-99999.)<br>If you want to filter alarms by specific alarm(s), you must add the alarm(s) to the scrolling list, then select them. Only selected alarms will display in the viewer window (when they are generated).<br>Add alarms to the list by entering the alarm in the text box and clicking on the Add to List button. Select the alarm(s) in the list. | |
| Message Contains | Filter according to the text displayed in the alarm message. | |
| Phone Line Numbers | Filter according to the line numbers on which the alarm condition occurred. Specify this as a range of phone lines. | |

## Advanced Filter

Advanced filter fields with picklists allow you to select only one element at a time. After selecting the element, click on the Add to Selection ▶ button. If you want to add more elements to the filter statement, select another element from the picklist and click the Add to Selection button again.

After finishing with a filter parameter, click on ▼ to put it into the Conditions area. From the Conditions area, you can make the filter statement part of the filter set (click on ▼), negate the statement (click on ⊟), or remove the last Filter statement from the Condition (click on ◀).

Selecting the ● Include button includes the values selected from the drop-down menu for that parameter, while selecting the ● Exclude button excludes the selected values for that parameter.

### Advanced Filter Parameters

Advanced filter properties contain all features available in the Simple Filter and adds the following:

**Advanced Filter Parameters Sheet 1 of 2**

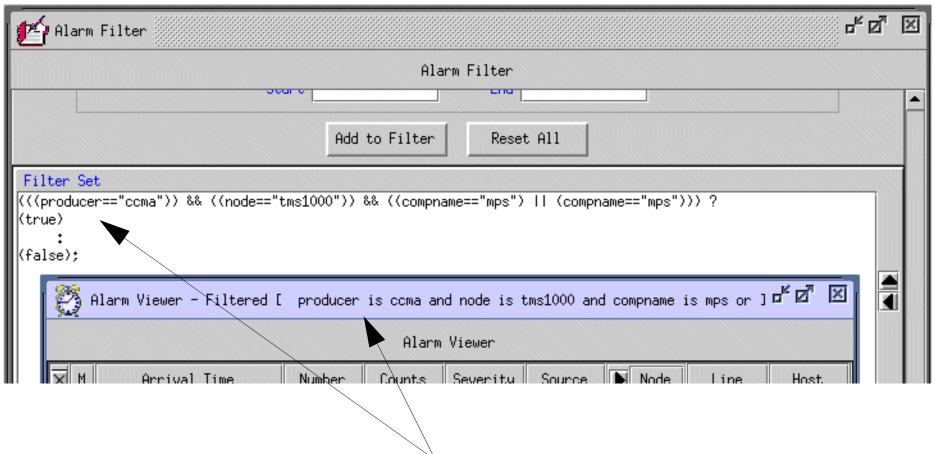
| | | |
|---|---|---|
| Alarm Producer (Source) | This parameter is same as "Processes" in Simple Filter. See "Processes" on page 259. | |
| Node | Filter according to the node on which the alarm condition occurred. | |
| Component | Filter according to *Component Type* and/or *Component Number* from which the alarm was generated. | |
| Host | Filter according to the external host to which the alarm applies. This is used only when filtering for alarm messages that are specific to external host communications. | |
| Frequency | Filter according to how often an alarm occurs in a set period of time. The alarm is not shown in the viewer until it exceeds the set threshold. | |
| Time Since Previous | Filter according to when the last time the same alarm occurred. The alarm is not shown in the viewer until it meets the specified criteria. | |
| Alarm Counts | Filter according to how often an alarm occurs. Unlike the frequency setting, this setting has no time limit for which the number of alarms must occur to satisfy the condition. | |
| | > >= | Display every occurrence of an alarm starting at (or after) the specified threshold. |
| | < <= | Display every occurrence of an alarm up until the specified threshold. |
| | Every | Display the every nth alarm message, where n is the specified threshold. For example, if n is 100, only the every 100th occurrence of this alarm is displayed in the viewer. |

**Advanced Filter Parameters Sheet 2 of 2**

| | | |
|---|---|---|
| Action on Success | Perform an action if a generated alarm satisfies all of the previously defined filter criteria. | |
| | true | Generate a “true” event (recognized by the alarm filter) |
| | false | Generate a “false” event (recognized by the alarm filter) |
| | print() | Print the alarm to the standard output on the system where the alarm occurs. |
| | log() | Log the alarm in a specified log file. You will be asked to enter the log file name. The log file must exist on the system where the alarm occurs and must be writable. |
| | email() | Send an email. You will be asked to enter an email address and subject line. |
| | consolidate() | Consolidate the alarms. You will be asked to enter the text for the alarm consolidation. |
| | discard() | Discard the alarm when it occurs. |
| Action on Failure | Perform an action if a generated alarm does not satisfy all of the previously defined filter criteria. The actions are the same as those listed for Action on Success | |

The default settings for Action On Success (true) and Action On Failure (false) will pass alarms that satisfy the specified filter criteria, and will not pass alarms that do not satisfy the specified filter criteria. Settings other than these defaults can result in different behavior.

After creating a filter, click on the filter window’s Start Alarm Viewer button to start an Alarm Viewer using the filter settings. The Filter appears in the Alarm Viewer’s title bar:



```
(((producer=="ccma")) && ((node=="tms1000")) && ((compname=="mps") || (compname=="mps"))) ?
(true)
    :
(false);
```

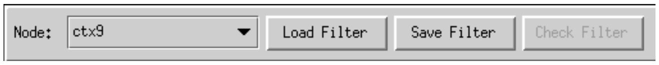
Alarm Viewer - Filtered [  producer is ccma and node is tms1000 and compname is mps or ]

The alarm filter statement, as created in the Alarm Filter window, appears in the title bar of the Alarm Viewer (when the Alarm Viewer is launched from the Alarm Filter window).

## Saving a Filter

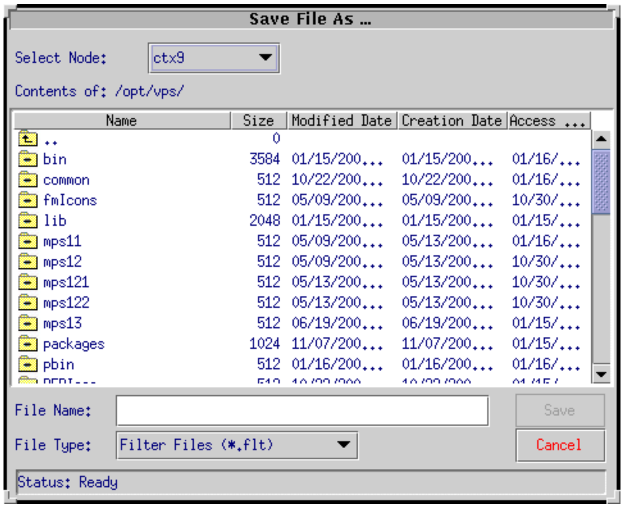
To save a filter file:

1. Verify that the filter performs as expected.
2. Select the node on which you want to save the filter



Node: ctx9

3. Click on Save Filter.
4. Select the directory in which to store the filter and enter a filter filename. Click on Save.



Select Node: ctx9

Contents of: /opt/vps/

| Name | Size | Modified Date | Creation Date | Access ... |
|---|---|---|---|---|
| .. | 0 | | | |
| bin | 3584 | 01/15/200... | 01/15/200... | 01/16/... |
| common | 512 | 10/22/200... | 10/22/200... | 01/16/... |
| fmIcons | 512 | 05/09/200... | 05/09/200... | 10/30/... |
| lib | 2048 | 01/15/200... | 01/15/200... | 01/15/... |
| mps11 | 512 | 05/09/200... | 05/13/200... | 01/16/... |
| mps12 | 512 | 05/09/200... | 05/13/200... | 10/30/... |
| mps121 | 512 | 05/13/200... | 05/13/200... | 10/30/... |
| mps122 | 512 | 05/13/200... | 05/13/200... | 10/30/... |
| mps13 | 512 | 06/19/200... | 06/19/200... | 01/15/... |
| packages | 1024 | 11/07/200... | 11/07/200... | 01/15/... |
| pbin | 512 | 01/16/200... | 01/16/200... | 01/16/... |

File Name:

File Type: Filter Files (*.flt)

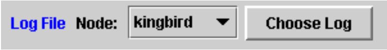
Status: Ready

## Filtering Alarm Log Files

You can use alarm filtering to filter alarm log viewing. The Alarm Filter only changes what is displayed in the Alarm Viewer. It does not change the contents of the existing alarm log files.

To view filtered alarm log files:

1. Create the filter (or load it from somewhere else).
2. Select the node which has the log file you wish to view (and filter)
3. Load the alarm log file



Node: kingbird

This Feature is not available now.

A

# Configuring Data Provider for PeriView

**<u>This chapter covers:</u>**

1. **Introduction**

## Introduction

The MPS Manager Data Provider (MMDP) collects information from the systems in the network and consolidates it for being used by PeriView. The Data Providers for PeriView are configured using PeriView's MMDP Configuration utility. For detailed information, refer the "MMDP Configuration" on page 181.

The MMDP Configurator allows you to configure every Data Provider across an entire corporation including multiple sites. You can use a browser to connect to any MMDP, that is acting as a Consolidator. (A consolidator can talk to other lower service MMDPs in the hierarchy.)

In PeriView, if you are connected to a consolidator MMDP, you can import or add another consolidator. In this case, when you save the configuration for the first consolidator MMDP, both the consolidators (and all the child service MMDPs) will get each MMDP's configuration data. Each MMDP in a system recognizes the configuration of all the other MMDPs unless the system is down.

The MMDP has a built-in replication feature which allows it to replicate information across the consolidator MMDPs anytime a change is made. If a connection between two consolidators is broken, the respective consolidator MMDPs try to reconnect to one another in every 15 seconds. On reconnection, the new configuration is transmitted.

☞ The Data Provider should not be stopped in any circumstances; the MMDP is capable of reconfiguring itself dynamically based on the new configuration including opening new connections to service MMDPs. An MMDP can handle changing from a consolidator to a service and back to consolidator without a restart.

**For Solaris,**

Start and stop the `S95avaya.pdp` service before the changes take effect. Issue the following commands to stop and start the `S95avaya.pdp` service.

```
etc/rc3d/S95avaya.pdp stop

etc/rc3d/S95avaya.pdp start
```

**For Windows,**

Go to `Start -> Programs -> Administrative Tools -> Service` to start or stop the Avaya PeriView Data Provider service.

B

# Netscape for Solaris Installation

<u>This chapter covers:</u>

1. Introduction
2. Installing Netscape browser on a Solaris workstation
3. Installing Java Plug-in

## Introduction

You can access PeriView from any workstation on the MPS network provided the workstation has an internet browser and the Java plugin installed. Netscape Communicator is installed by default in later versions of Solaris. However, if you want to use a Solaris workstation which does not have a browser installed, or your Solaris browser does not have the Java plugin installed, use the following procedures.

### Installing Netscape 4.7X for Solaris/SPARC

1. Download the netscape 4.7/X package from:
   http://wp.netscape.com/download/archive.html
2. Unpack the distribution file using the following command:
   **`gzip -dc <filename>.tar.gz | tar -xvf -`**
3. Start the installation
   **`./ns-install`**
4. Add the Netscape binary path (typically `/opt/netscape`) to your `$PATH` environment variable.

### Installing Java Plug-in

1. Log in as root (superuser) and download the Java plugin software (or the entire Java Runtime Environment) from:
   http://java.sun.com/products/archive
2. Change directory to `/opt`
   **`cd /opt`**
3. Run the install script:
   **`./j2re-1_4_1-solaris-sparc.sh`** (for JRE)
4. Verify that the plugin/JRE install directory (and contents) exists.
5. Add the following to your environment:
   ```
   setenv NPX_PLUGIN_PATH
   /opt/installed_jre_dir/plugin/sparc/ns4
   ```

Test the browser and/or plugin installation by starting the browser and accessing the PeriView page:

http://<*PeriView_nodename*>/periview/PeriView.html

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